Dell Latitude 5420/E5420/E5420m Owner's Manual

Regulatory Model: P15F
Regulatory Type: P15F001

Napomene, oprez i upozorenja

NAPOMENA: NAPOMENA ukazuje na važne informacije koje će vam pomoći da iskoristite računar na bolji način.

OPREZ: OPREZ ukazuje na potencijalno oštećenje hardvera ili gubitak podataka u slučaju nepoštovanja uputstava.

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1

Rad na računaru

Pre rada u unutrašnjosti računara

Koristite sledeće mere predostrožnosti kako biste svoj računar zaštitili od mogućih oštećenja i kako osigurali svoju ličnu bezbednost. Osim ako nije drugačije navedeno, svaka procedura u ovom dokumentu pretpostavlja da su ispunjeni sledeći uslovi:

- Izvršili ste korake navedene u odeljku Rad na računaru.
- Pročitali ste bezbednosne informacije koje ste dobili uz računar.
- Komponenta se može zameniti ili, ako je kupljena odvojeno, instalirati izvođenjem procedure uklanjanja u obrnutom redosledu.

UPOZORENJE: Pre rada u unutrašnjosti računara, pročitajte bezbednosne informacije koje ste dobili uz računar. Za dodatne informacije o najboljim praksama pogledajte početnu stranu za usklađenost za propisima na www.dell.com/regulatory_compliance.

OPREZ: Mnoge popravke mogu da obavljaju isključivo ovlašćeni servisni tehničari. Lično bi trebalo da obavljate samo rešavanje problema i sitne popravke, prema ovlašćenjima iz dokumentacije proizvoda ili u skladu sa uputstvima službe i tima za podršku na mreži ili putem telefona. Garancija ne pokriva štetu nastalu kao posledica servisiranja koje nije ovlašćeno od strane kompanije Dell. Pročitajte bezbednosna uputstva koja ste dobili sa proizvodom i pridržavajte ih se.

OPREZ: Da biste izbegli elektrostatičko pražnjenje, uzemljite se pomoću trake za uzemljenje ili povremeno dodirujte neobojenu metalnu površinu, kao što je konektor na zadnjem delu računara.

OPREZ: Komponentama i karticama rukujte pažljivo. Ne dirajte komponente ili kontakte na kartici. Karticu držite za ivice ili za njen metalni držač. Držite komponentu kao što je procesor za ivice, a ne za pinove.

OPREZ: Kada odspajate kabl, povucite njegov konektor ili jezičak za povlačenje, a ne sam kabl. Neki kablovi imaju konektore sa držačima za zaključavanje; ako isključujete ovu vrstu kabla, pritisnite držače za zaključavanje pre nego što odspojite kabl. Kada razdvajate konektore držite ih poravnate i izbegavajte krivljenje bilo kojeg pina konektora. Takođe, pre nego što priključite kabl, pobrinite se da su oba konektora pravilno okrenuta i poravnata.

NAPOMENA: Boja vašeg računara i nekih komponenata može izgledati drugačije u odnosu na one prikazane u ovom dokumentu.

Da biste izbegli oštećenje računara, prođite kroz sledeće korake pre nego što počnete sa radom u unutrašnjosti računara.

1. Uverite se da je vaša radna površina ravna i čista da biste sprečili grebanje poklopca računara.
2. Isključite računar (pogledajte odeljak Isključivanje računara).
3. Ako je uređaj priključen na priključnu stanicu, kao što je opcionalna medijska baza ili rezervna baterija, odspojite ga.

   OPREZ: Da biste odspojili mrežni kabl, prvo isključite kabl iz računara a zatim isključite kabl iz mrežnog uređaja.
4. Odspojite sve mrežne kablove iz računara.

5. Isključite računar i sve priključene uređaje iz pripadajućih električnih utičnica.
6. Zatvorite ekran i okrenite računar naopako na ravnoj radnoj površini.

   NAPOMENA: Da biste izbegli oštećenje matične ploče, pre servisiranja računara morate ukloniti glavnu bateriju.
7. Uklonite glavnu bateriju.
8. Okrenite računar tako da gornja strana bude gore.
9. Otvorite ekran.
10. Pritisnite taster za napajanje da biste uzemljili matičnu ploču.

    OPREZ: Da biste se zaštitili od električnog udara, pre otvaranja ekrana uvek isključujte računar iz električne utičnice.

    OPREZ: Pre nego što dodirnete unutrašnjost računara, uzemljite se dodirivanjem neobojene metalne površine, kao što je metal na zadnjoj strani računara. Dok radite, povremeno dodirujte neobojenu metalnu površinu kako biste odstranili statički elektricitet koji bi mogao da ošteti unutrašnje komponente.
11. Uklonite instalirane ExpressCard kartice ili "smart" kartice iz odgovarajućih slotova.

Preporučeni alati

Za procedure u ovom dokumentu mogu se zahtevati sledeći alati:

- Mali odvrtač sa ravni vrhom
- #0 Phillips odvrtač
- #1 Phillips odvrtač
- Malo plastično šilo
- CD sa programom za ažuriranje flešovanja BIOS-a

Isključivanje računara

OPREZ: Da bi se izbegao gubitak podataka, sačuvajte i zatvorite sve otvorene datoteke i zatvorite sve otvorene programe pre nego što isključite računar.

1. Isključite operativni sistem:

   – Za Windows Vista :

   Kliknite na **Start** , zatim kliknite na strelicu u donjem desnom uglu **Start** menija, kao što je dole prikazano, a zatim kliknite na **Isključenje**.

   – Za Windows XP:

   Kliknite na **Start** → **Isključi računar** → **Isključi** . Računar se isključuje nakon završetka procesa isključivanja operativnog sistema.
2. Uverite se da su računar i svi povezani uređaji isključeni. Ako se računar i povezani uređaji nisu automatski isključili kada ste isključili operativni sistem, pritisnite i zadržite taster za napajanje otprilike 4 sekundi da biste ih isključili.

Posle rada u unutrašnjosti računara

Nakon što završite bilo koju proceduru zamene, a pre nego što uključite računar, uverite se da su svi eksterni uređaji, kartice i kablovi povezani.

OPREZ: Da bi se izbeglo oštećenje računara, koristite baterije dizajnirane samo za ovaj tip Dell računara. Ne koristite baterije dizajnirane za druge Dell računare.

1. Povežite eksterne uređaje, kao što je replikator portova, rezervna baterija ili medijska baza, i zamenite kartice, kao što je ExpressCard.
2. Povežite telefonske ili mrežne kablove sa računarom.

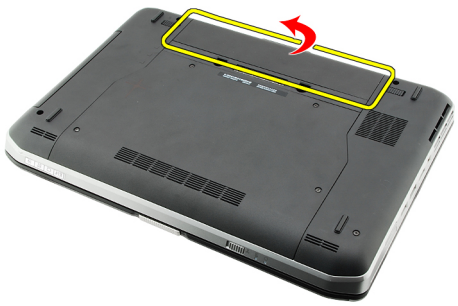
   OPREZ: Da biste povezali mrežni kabl, prvo priključite kabl u mrežni uređaj a zatim ga priključite u računar.
3. Zamenite bateriju.
4. Priključite računar i sve povezane uređaje u odgovarajuće električne utičnice.
5. Uključite računar.

Baterija

Removing the Battery

1. Follow the procedures in Before Working On Your Computer.
2. Slide the release latches to unlock the battery.

3. Remove the battery from the computer.



Related Links

Installing the Battery

Installing the Battery

1. Slide the battery back into the computer.
   The release latches automatically click into the lock position.
2. Follow the procedures in After Working Inside Your Computer.

Related Links

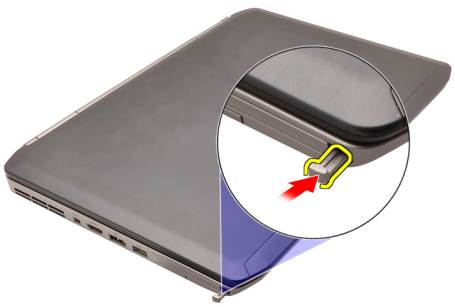
Removing the Battery

PC Card

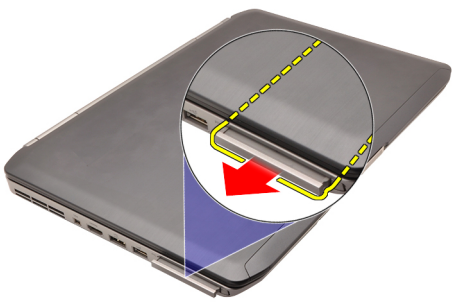
Removing the PC Card

1. Follow the procedures in Before Working On Your Computer.
2. Press in on the PC latch to release the latch.

3. Press in on the PC latch to release the PC card.



4. Slide the PC card out of the computer.



Related Links

Installing the PC Card

Installing the PC Card

1. Push the PC latch to lock it.
2. Push the PC card to its slot until it clicks.
3. Follow the procedures in After Working Inside Your Computer.

Related Links

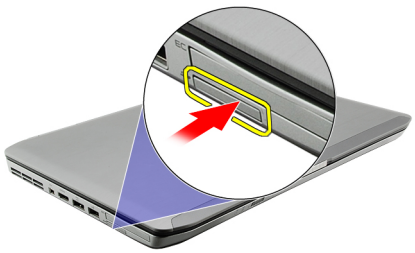
Removing the PC Card

4

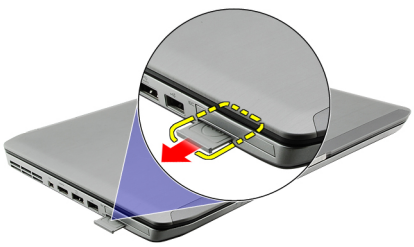
Secure Digital (SD) kartica

Removing The Secure Digital (SD) Card

1. Follow the procedures in Before Working On Your Computer.
2. Push in on the SD card.



3. Slide the SD card out of the computer.



Related Links

Installing The Secure Digital (SD) Card

Installing The Secure Digital (SD) Card

1. Slide the SD card into its slot until it clicks into place.
2. Follow the procedures in After Working Inside Your Computer.

Related Links

Removing The Secure Digital (SD) Card

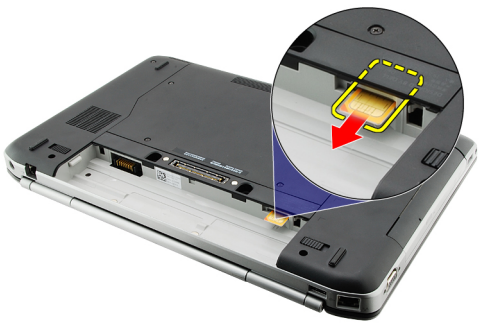
5

Kartica za modul pretplatničkog identiteta (SIM)

Removing the Subscriber Identity Module (SIM) Card

1. Follow the procedures in Before Working On Your Computer.
2. Remove the battery.
3. Press and release the SIM card located on the battery wall.

4. Slide the SIM card from the computer.



Related Links

Installing the Subscriber Identity Module (SIM) Card

Installing the Subscriber Identity Module (SIM) Card

1. Insert the SIM card into the slot.
2. Replace the battery.
3. Follow the procedures in After Working Inside Your Computer.

Related Links

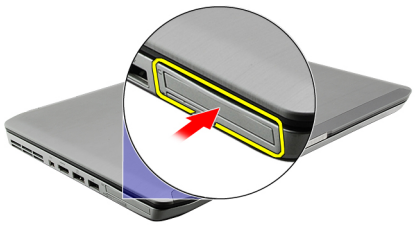
Removing the Subscriber Identity Module (SIM) Card

6

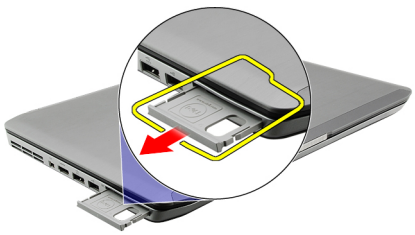
ExpressCard

Removing the ExpressCard

1. Follow the procedures in Before Working On Your Computer.
2. Push in on the ExpressCard.



3. Slide the ExpressCard out of the computer.



Related Links

Installing the ExpressCard

Installing the ExpressCard

1. Insert the ExpressCard into the slot until it clicks into place.
2. Follow the procedures in After Working Inside Your Computer.

Related Links

Removing the ExpressCard

7

Zadnja ploča

Removing the Back Panel

1. Follow the procedures in Before Working On Your Computer.
2. Remove the battery.
3. Remove the screws that secure the back panel.

4. Slide and remove the back panel toward the front of the computer .

Related Links

Installing the Back Panel

Installing the Back Panel

1. Slide the back panel towards the back of the computer.
2. Tighten the screws to secure the back panel.
3. Replace the battery.
4. Follow the procedures in After Working Inside Your Computer.

Related Links

Removing the Back Panel

8

Okvir tastature

Removing the Keyboard Trim

1. Follow the procedures in Before Working On Your Computer.
2. Remove the battery.
3. Pry up the keyboard trim from the bottom edge.

4. Pry up the keyboard trim from the top edge.

5. Remove the keyboard trim from the computer.

Related Links

Installing the Keyboard Trim

Installing the Keyboard Trim

1. Align the keyboard trim with the tabs on the top of the palm rest.
2. Press along the top edge to latch on the tabs.
3. Work your way around the sides and bottom edge of the keyboard trim.
4. Press the keyboard trim down along all the edges until it clicks into place.
5. Replace the battery.
6. Follow the procedures in After Working Inside Your Computer.

Related Links

Removing the Keyboard Trim

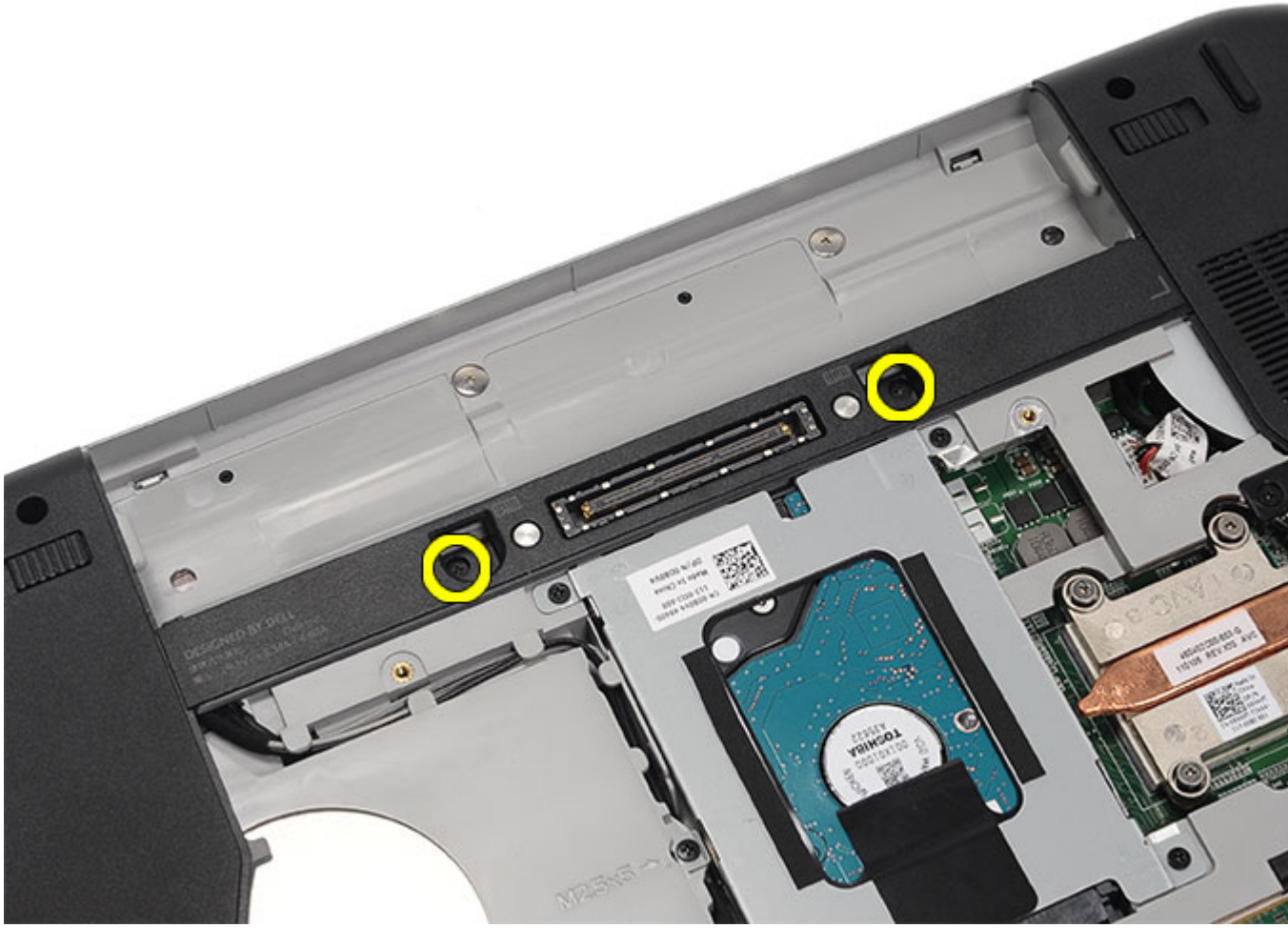
9

Tastatura

Removing the Keyboard

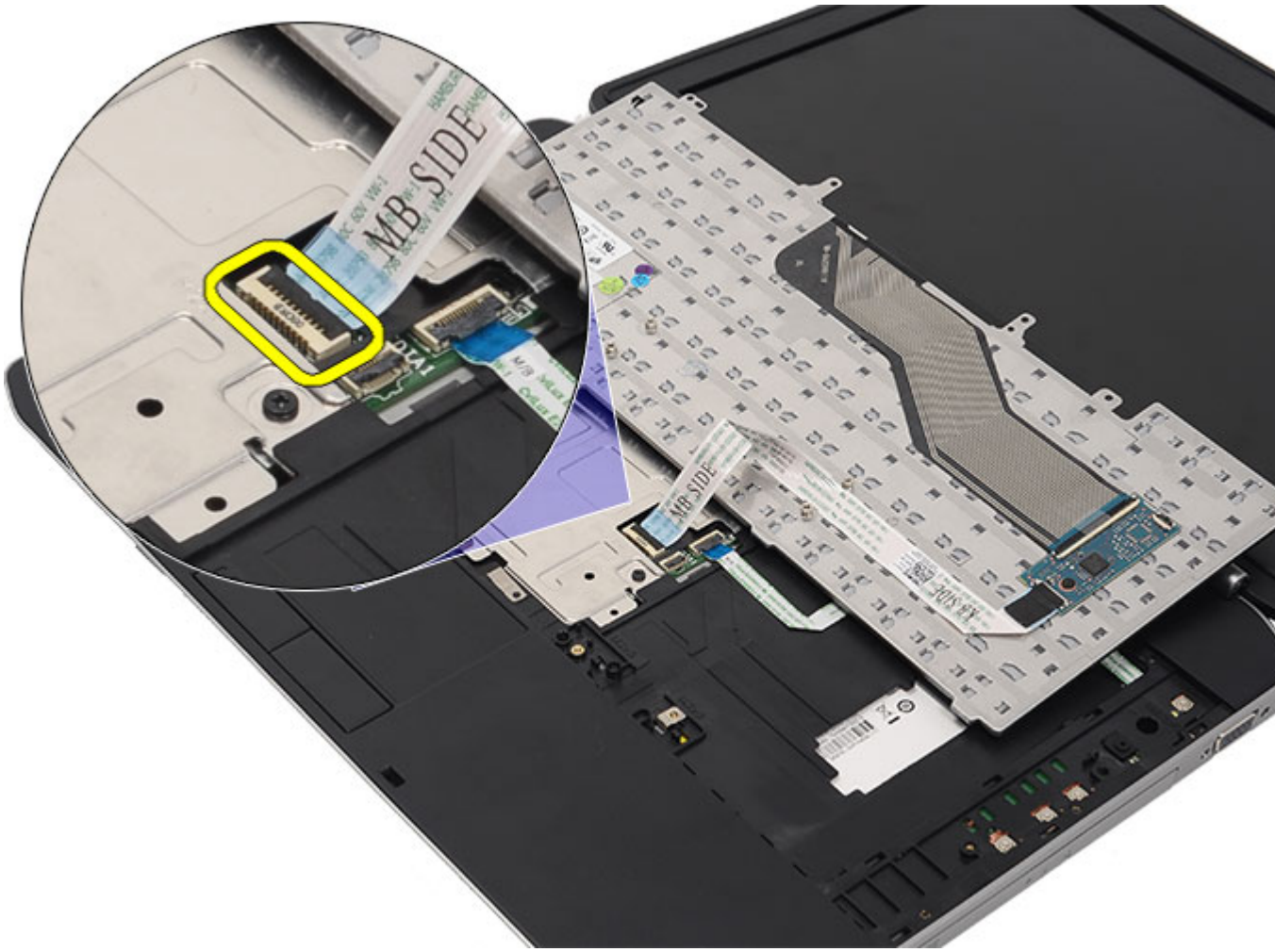
1. Follow the procedures in Before Working On Your Computer.
2. Remove the battery.
3. Remove the keyboard trim.
4. Remove the screws that secure the keyboard to the front of the computer.

5. Flip the computer and remove the screws that secure the keyboard to the computer.

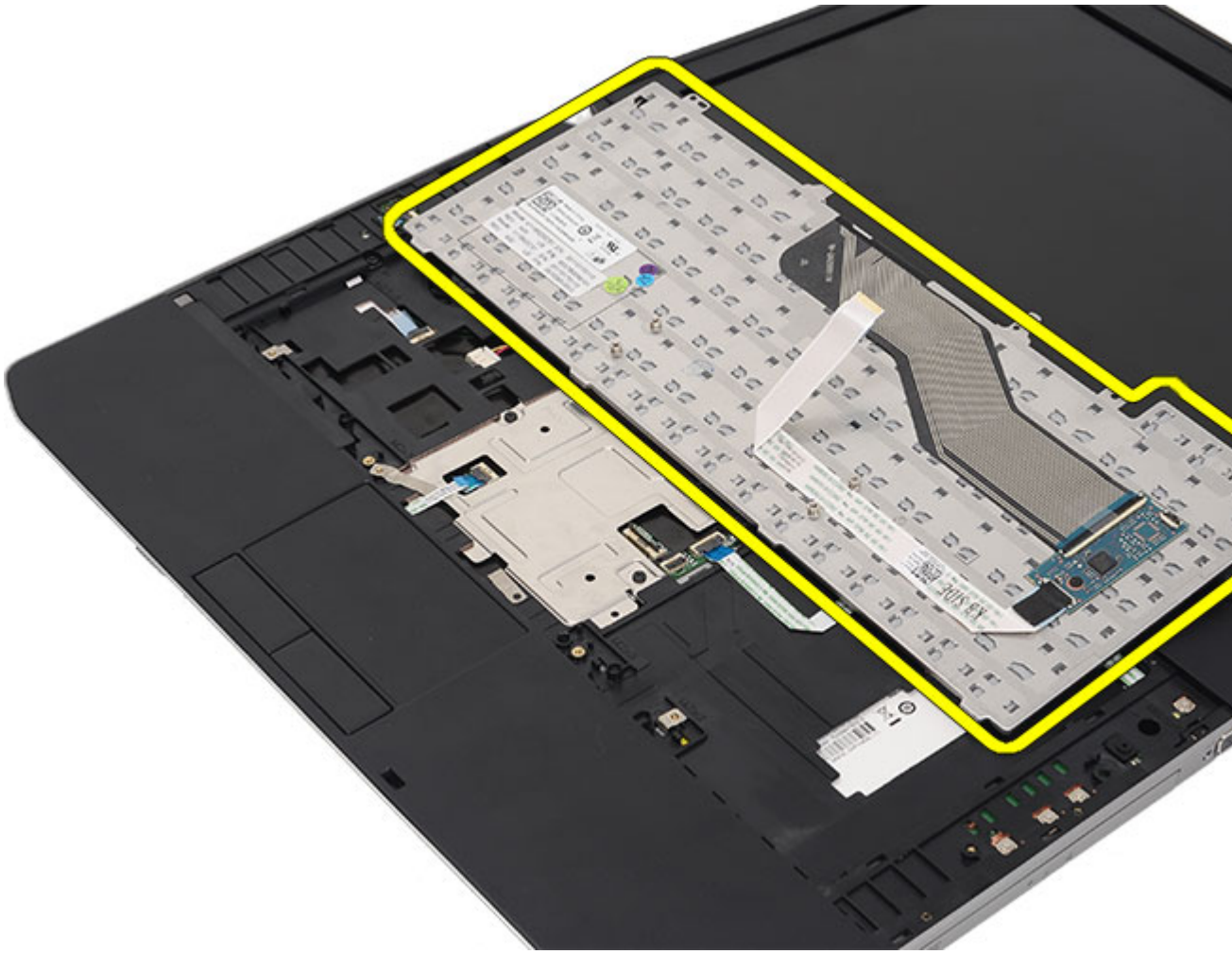


6. Flip the keyboard.

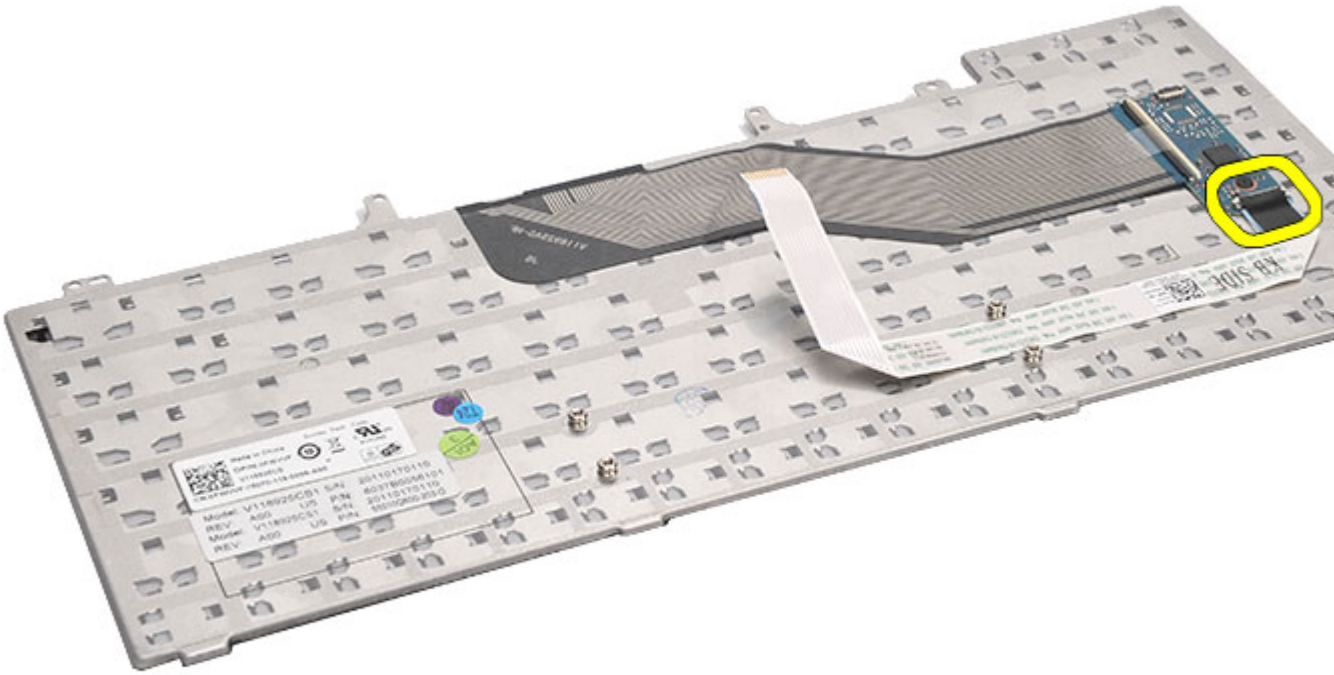
7. Disconnect the keyboard data cable from the computer.



8. Remove the keyboard from the computer.



9. Disconnect and remove the cable from the keyboard.



Related Links

Installing the Keyboard

Installing the Keyboard

1. Connect the keyboard-data cable to the system board.
2. Connect the keyboard data cable to the back of the keyboard.
3. Replace the tape to secure the keyboard data cable to the back of the keyboard.
4. Replace the keyboard on the palm rest to align with the screw holes.
5. Tighten the keyboard screws.
6. Flip the keyboard and tighten the screws.
7. Replace the keyboard trim.
8. Replace the battery.
9. Follow the procedures in After Working Inside Your Computer.

Related Links

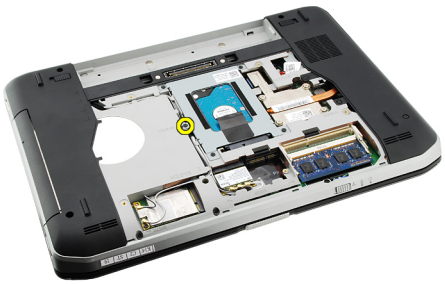
Removing the Keyboard

10

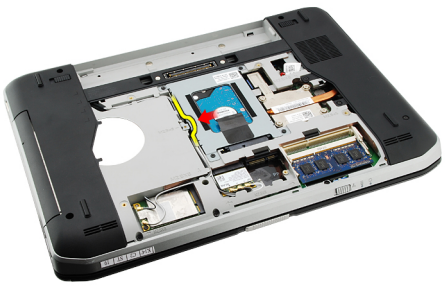
Optički disk

Removing the Optical Drive

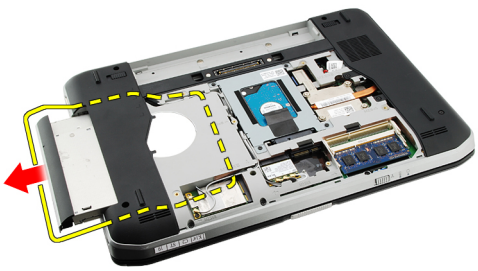
1. Follow the procedures in Before Working On Your Computer.
2. Remove the battery.
3. Remove the back panel.
4. Remove the screw that secures the optical drive to the computer.



5. Push the screw tab away from the computer to release the optical drive from the drive bay.



6. Remove the optical drive from the computer.



Related Links

Installing the Optical Drive

1. Slide the optical drive into the drive bay on the right side of the computer.
2. Tighten the screw on the back of the computer to secure the optical drive.
3. Replace the back panel.
4. Replace the battery.
5. Follow the procedures in After Working Inside Your Computer.

Related Links

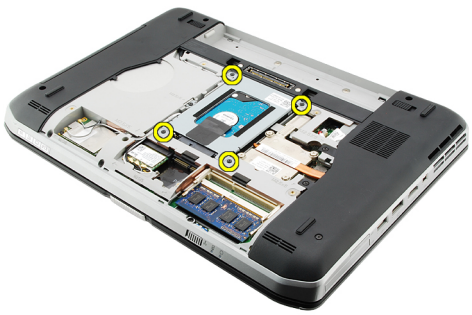
Removing the Optical Drive

11

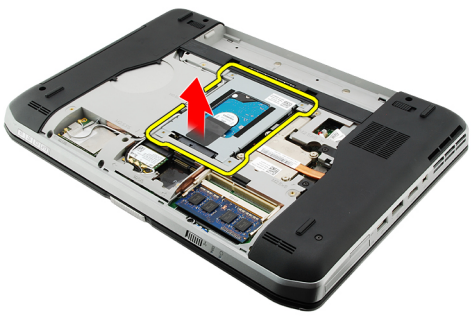
Čvrsti disk

Removing the Hard Drive

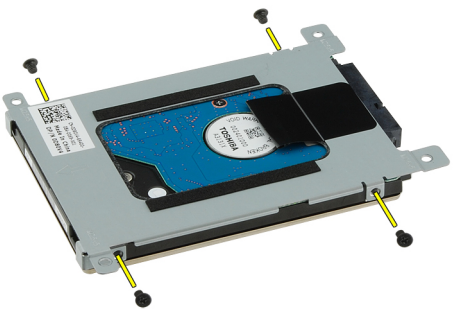
1. Follow the procedures in Before Working On Your Computer.
2. Remove the battery.
3. Remove the back panel.
4. Remove the screws that secure the hard-drive bracket to the computer.



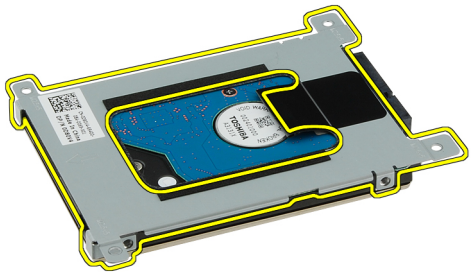
5. Use the tab to pull the hard-drive bracket upward and remove it from the computer.



6. Remove the hard-drive bracket screws.



7. Disconnect the bracket from the hard drive.



8. Disconnect the hard-drive connector from the hard drive.

Related Links

Installing the Hard Drive Assembly

Installing the Hard Drive

1. Reconnect the hard-drive connector to the hard drive.
2. Attach the hard-drive bracket to the hard drive.
3. Tighten the hard-drive bracket screws to ensure that the bracket is correctly aligned and holding the hard drive.
4. Slide the hard drive into the bay towards the connector on the system board.
5. Tighten the screws to secure the hard drive.
6. Replace the back panel.
7. Replace the battery.
8. Follow the procedures in After Working Inside Your Computer.

Related Links

Removing the Hard Drive Assembly

12

Kartica za bežičnu lokalnu mrežu (WLAN)

Removing the Wireless Local Area Network (WLAN) Card

1. Follow the procedures in Before Working On Your Computer.
2. Remove the battery.
3. Remove the back panel.
4. Disconnect the antenna cables from the WLAN card.

5. Remove the screw that secures the WLAN card to system board.

6. Remove the WLAN card.

Related Links

Installing the Wireless Local Area Network (WLAN) Card

Installing The Wireless Local Area Network (WLAN) Card

1. Slide the WLAN card into its slot.
2. Tighten the screw to secure the WLAN card to the computer.
3. Connect the antenna cables according to the color code on the WLAN card.
4. Replace the back panel.
5. Replace the battery.
6. Follow the procedures in After Working Inside Your Computer.

Related Links

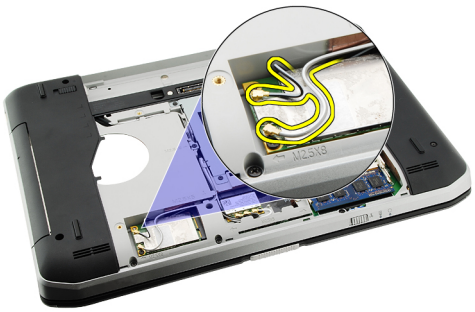
Removing the Wireless Local Area Network (WLAN) Card

13

Kartica za bežičnu mrežu šireg geografskog područja (WWAN)

Removing the Wireless Wide Area Network (WWAN) Card

1. Follow the procedures in Before Working On Your Computer.
2. Remove the battery.
3. Remove the back panel.
4. Disconnect the antenna cables from the WWAN card.



5. Remove the screw that secures the WWAN card to the system board.

6. Remove the WWAN card.

Related Links

Installing the Wireless Wide Area Network (WWAN) card

Installing The Wireless Wide Area Network (WWAN) Card

1. Slide the WWAN card into its slot.
2. Tighten the screw to secure the WWAN card to the computer.
3. Connect the antenna cables according to the color code on the WWAN card.
4. Replace the back panel.
5. Replace the battery.
6. Follow the procedures in After Working Inside Your Computer.

Related Links

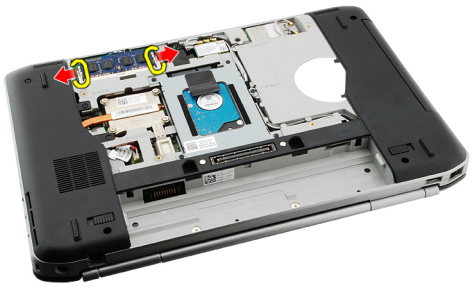
Removing the Wireless Wide Area Network (WWAN) Card

14

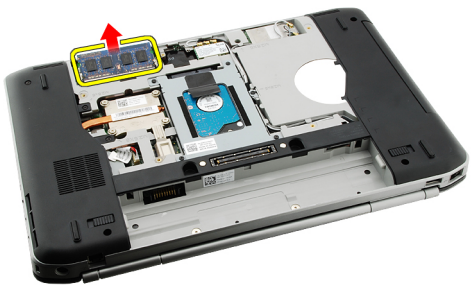
Memorija

Removing the Memory Module

1. Follow the procedures in Before Working On Your Computer.
2. Remove the battery.
3. Remove the back panel.
4. Pry the retention clips away from the memory module.



5. Remove the memory module from the computer.



Related Links

Installing The Memory Module

Installing the Memory Module

1. Insert the memory module into the slot in the computer.
2. Press down the memory module until the retention clips secure the memory module.
3. Replace the back panel.
4. Replace the battery.
5. Follow the procedures in After Working Inside Your Computer.

Related Links

Removing the Memory Module

15

CPU Door

Removing the CPU Door

1. Follow the procedures in Before Working On Your Computer.
2. Remove the battery.
3. Remove the back panel.
4. Remove the screws that secure the CPU door to the computer.

5. Remove the CPU door.

Related Links

Installing the CPU Door

Installing the CPU Door

1. Slide the CPU door downwards and towards the back of the computer.
2. Tighten the screws to secure the CPU door.
3. Replace the back panel.
4. Replace the battery.
5. Follow the procedures in After Working Inside Your Computer.

Related Links

Removing the CPU Door

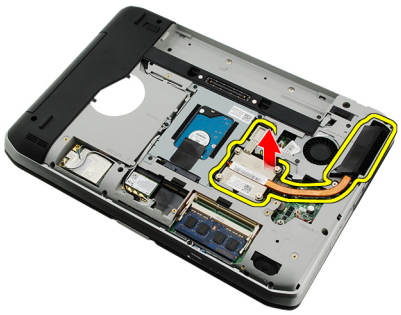
16

Rashladni element

Removing The Heat Sink

1. Follow the procedures in Before Working On Your Computer.
2. Remove the battery.
3. Remove the back panel.
4. Remove the CPU door.
5. Loosen the screws on the heat sink.

6. Lift the heat sink and remove it from the computer.



Related Links

Installing The Heat Sink

Installing the Heat Sink

1. Tighten the screws as per the numerical sequence on the heat sink module.
   Ensure that the heat sink is correctly aligned and seated over the processor.
2. Replace the CPU door.
3. Replace the back panel.
4. Replace the battery.

5. Follow the procedures in After Working Inside Your Computer.

Related Links

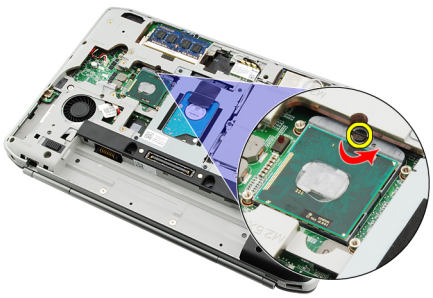
Removing the Heat Sink

17

Procesor

Removing the Processor

1. Follow the procedures in Before Working On Your Computer.
2. Remove the battery.
3. Remove the back panel.
4. Remove the CPU door.
5. Remove the heat sink.
6. Rotate the processor-cam screw in counter-clockwise direction.



7. Remove the processor.

Related Links

Installing the Processor

Installing the Processor

1. Insert the processor into the processor socket.
2. Replace the heat sink.
3. Replace the CPU door.
4. Replace the back panel.

5. Replace the battery.
6. Follow the procedures in After Working Inside Your Computer.

Related Links

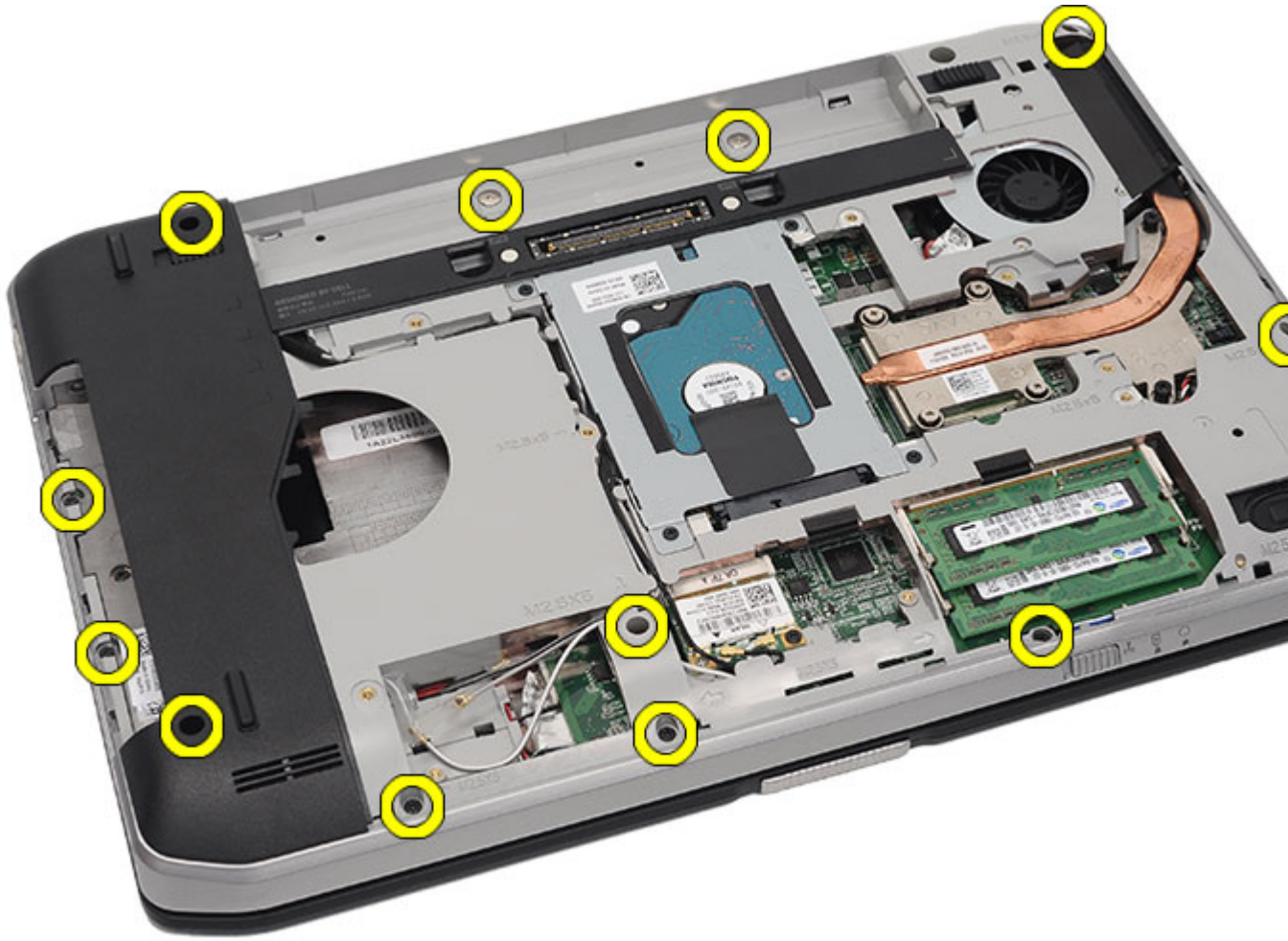
Removing the Processor

18

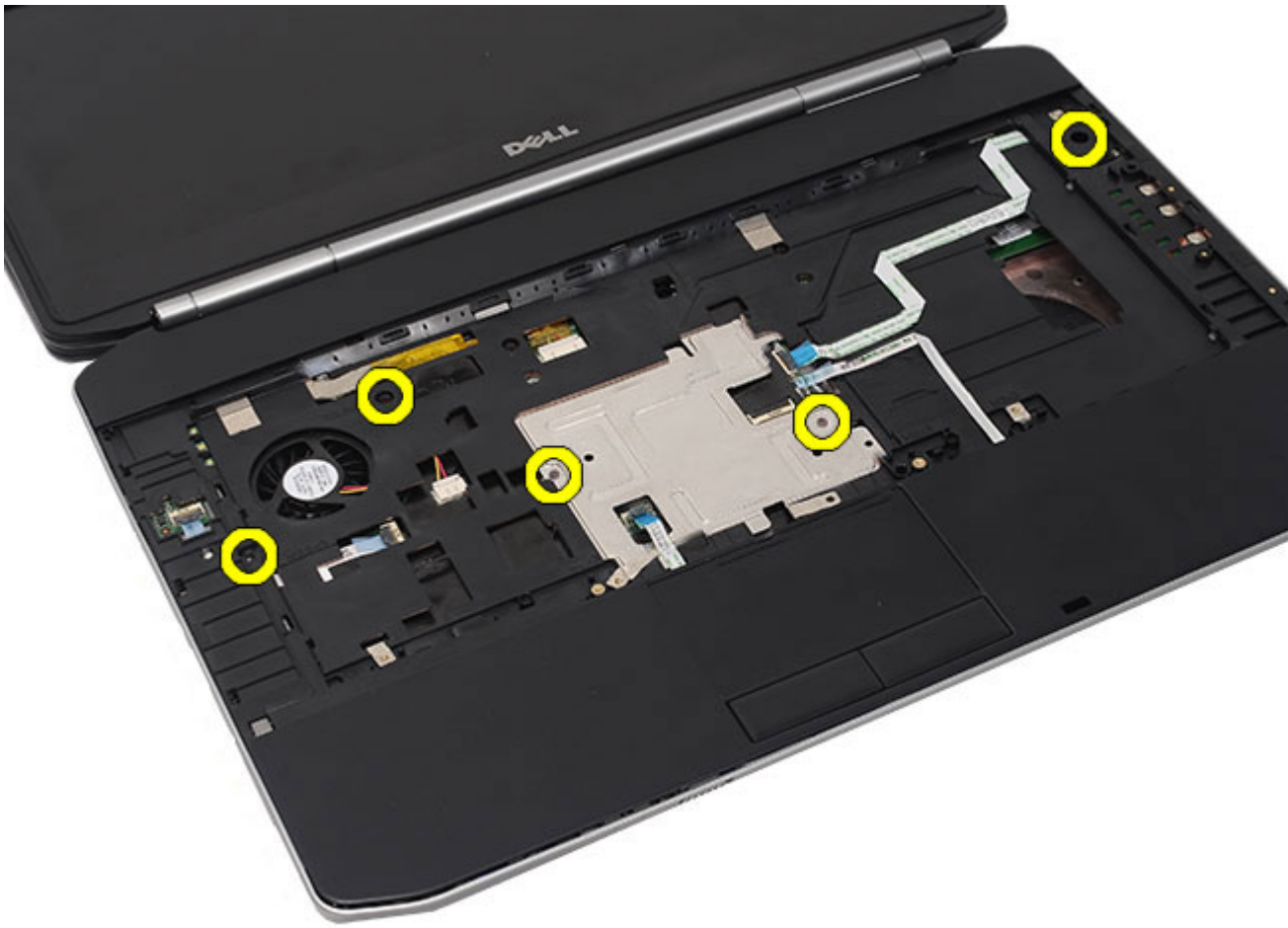
Oslonac za dlan

Removing the Palm Rest

1. Follow the procedures in Before Working On Your Computer.
2. Remove the battery.
3. Remove the back panel.
4. Remove the keyboard trim.
5. Remove the keyboard.
6. Remove the optical drive.
7. Remove the CPU door.
8. Remove the screws from the bottom of the computer.



9. Flip the computer and remove the screws from the back of the computer.



10. Disconnect the following cables from the computer:
    - power button cable
    - fingerprint cable
    - touchpad cable

11. Lift up the left edge of the palm rest assembly.

12. Release the tabs on the right edge of the palm rest assembly.

13. Remove the palm rest assembly from the computer.

Related Links

Installing the Palm Rest

Installing the Palm Rest

1. From the left edge of the palm rest, press the palm rest downwards on all the edges on the computer.
2. Press down on all edges to ensure that the tabs are engaged.
3. Connect the following cables to the system board:
   - power button cable
   - fingerprint cable
   - touchpad cable
4. Tighten the screws to secure the palm rest.
5. Flip the computer over and tighten the screws to secure the palm rest.
6. Replace the CPU door.
7. Replace the keyboard.
8. Replace the keyboard trim.

9. Replace the optical drive.
10. Replace the back panel.
11. Replace the battery.
12. Follow the procedures in After Working Inside Your Computer.

Related Links

Removing the Palm Rest

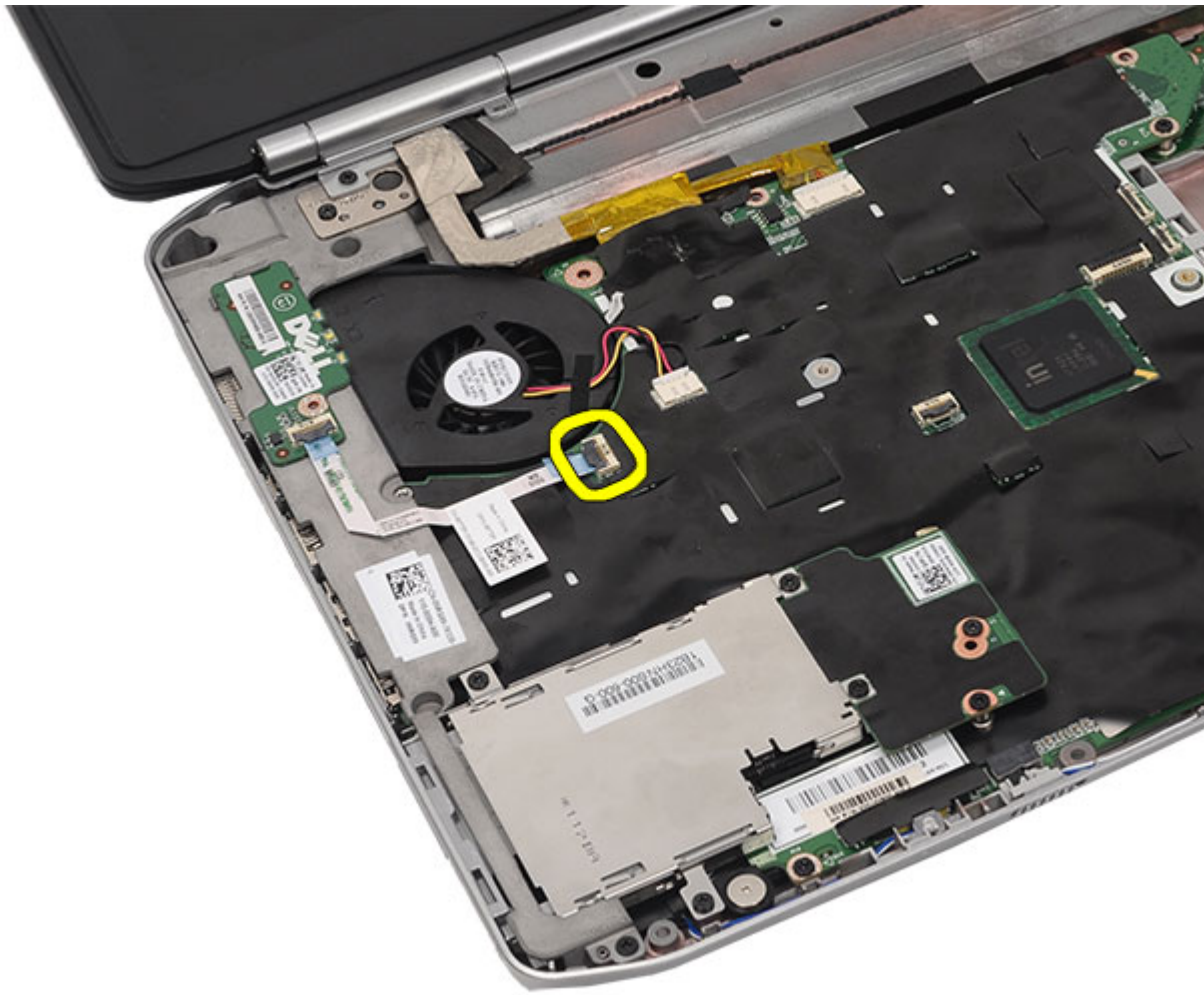
19

LED ploča

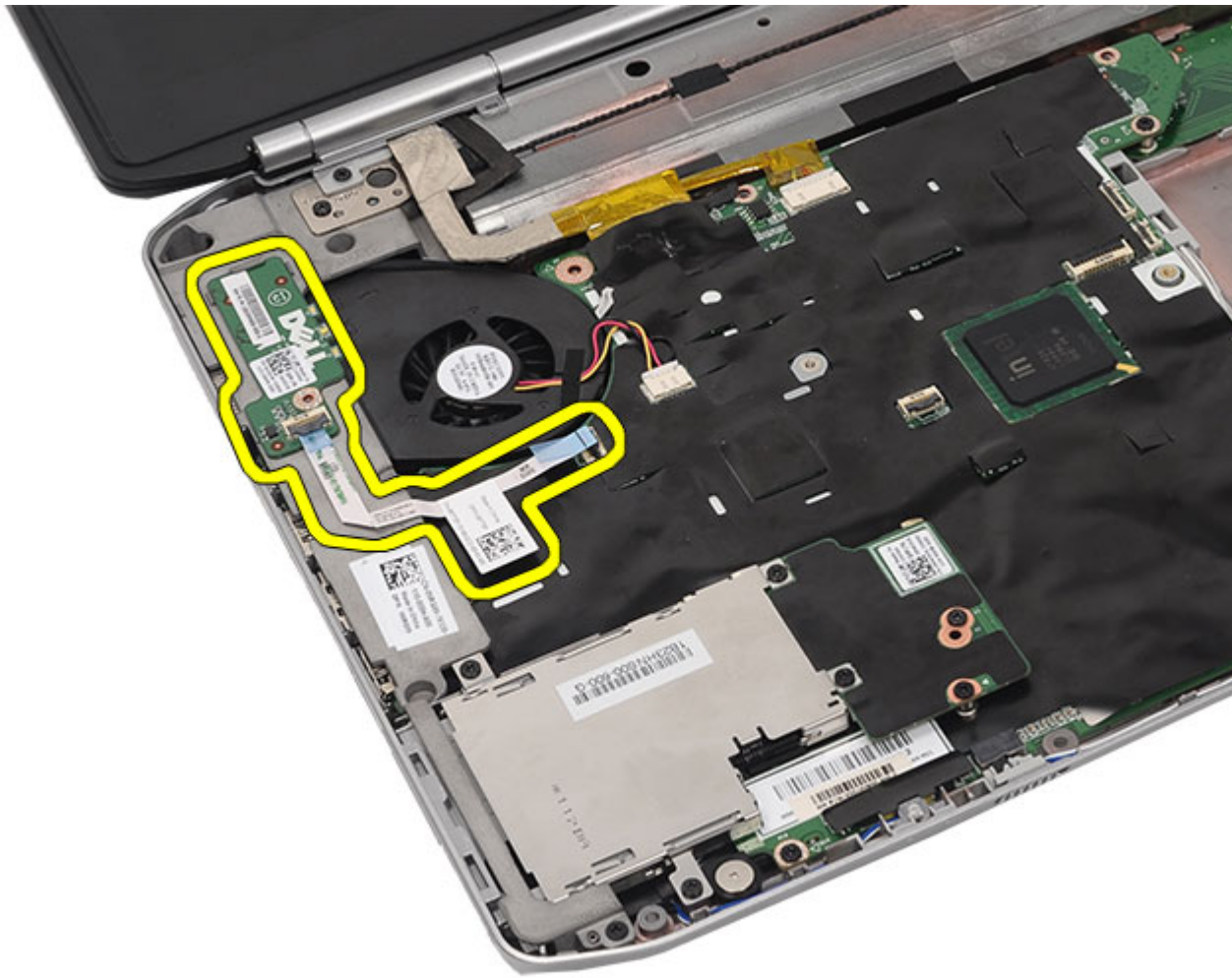
Removing the LED Board

1. Follow the procedures in Before Working On Your Computer.
2. Remove the battery.
3. Remove the back panel.
4. Remove the keyboard trim.
5. Remove the keyboard.
6. Remove the optical drive.
7. Remove the CPU door.
8. Remove the palm rest.
9. Remove the screw that secures the LED board to the computer.

10. Disconnect the LED board cable from the system board connector.



11. Remove the LED board.



Related Links

Installing the LED Board

Installing the LED Board

1. Insert the LED board on the left bracket.
2. Connect the cable to the system board.
3. Tighten the screw to secure the LED board.
4. Replace the palm rest.
5. Replace the CPU door.
6. Replace the keyboard.
7. Replace the keyboard trim.
8. Replace the optical drive.
9. Replace the back panel.
10. Replace the battery.
11. Follow the procedures in After Working Inside Your Computer.

Related Links

Removing the LED Board

20

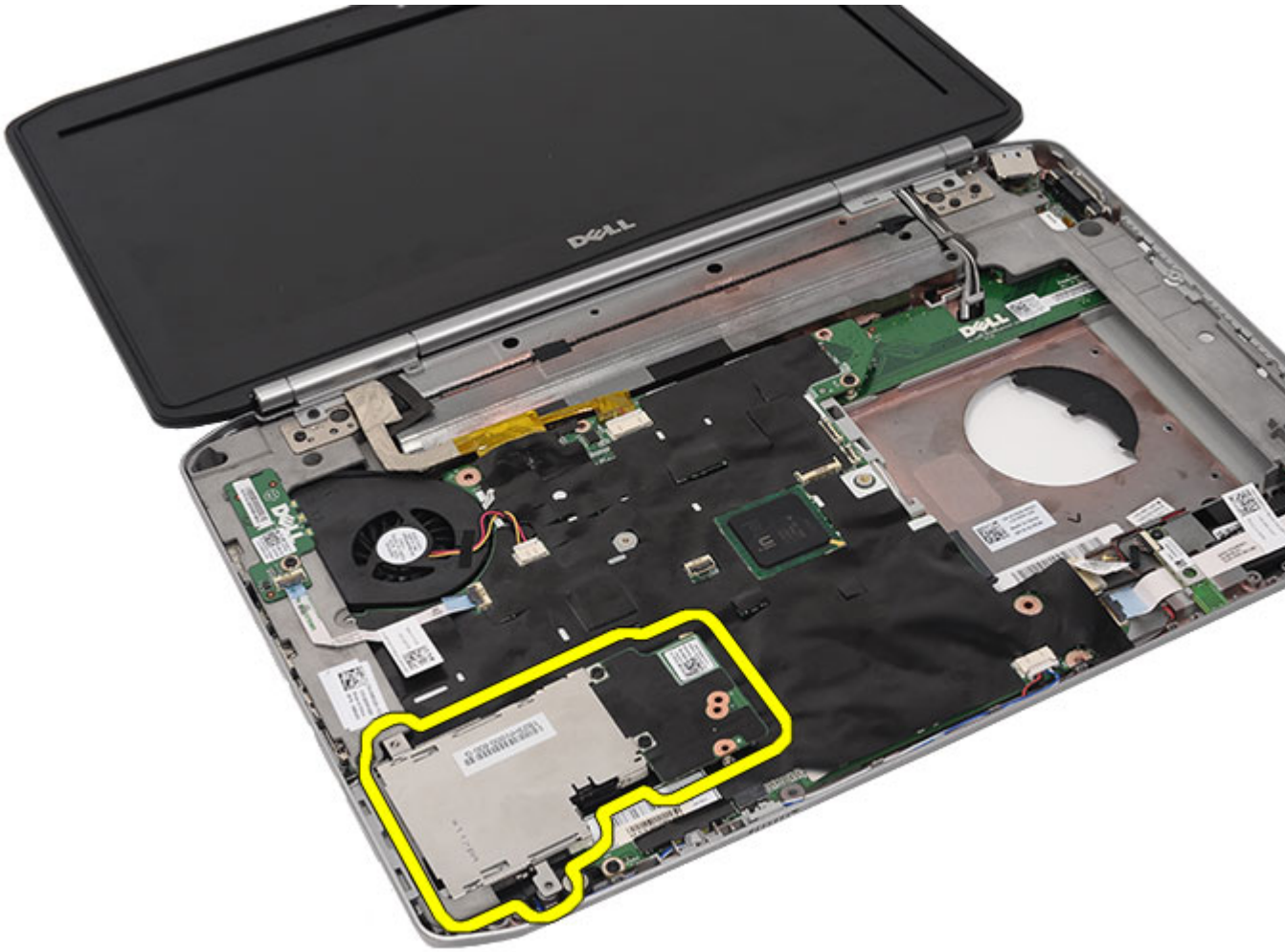
ExpressCard/Smart Card/PCMCIA Module

Removing the ExpressCard/Smart Card/PCMCIA Module

1. Follow the procedures in Before Working On Your Computer.
2. Remove the battery.
3. Remove the back panel.
4. Remove the keyboard trim.
5. Remove the keyboard
6. Remove the optical drive.
7. Remove the CPU door.
8. Remove the palm rest.
9. Remove the screws that secure the ExpressCard/Smart Card/PCMCIA module to the computer.

10. Disconnect the cage from the system board connector.

11. Remove the ExpressCard/Smart Card/PCMCIA module.



Related Links

Installing the ExpressCard/Smart Card/PCMCIA Module

Installing the ExpressCard/Smart Card/PCMCIA Module

1. Attach the connector on the back of the ExpressCard/Smart Card/PCMCIA module, to the connector on the system board.
2. Tighten the screws to secure the ExpressCard/Smart Card/PCMCIA module.
3. Replace the palm rest.
4. Replace the CPU door.
5. Replace the keyboard trim.
6. Replace the keyboard.
7. Replace the optical drive.
8. Replace the back panel.
9. Replace the battery.
10. Follow the procedures in After Working Inside Your Computer.

Related Links

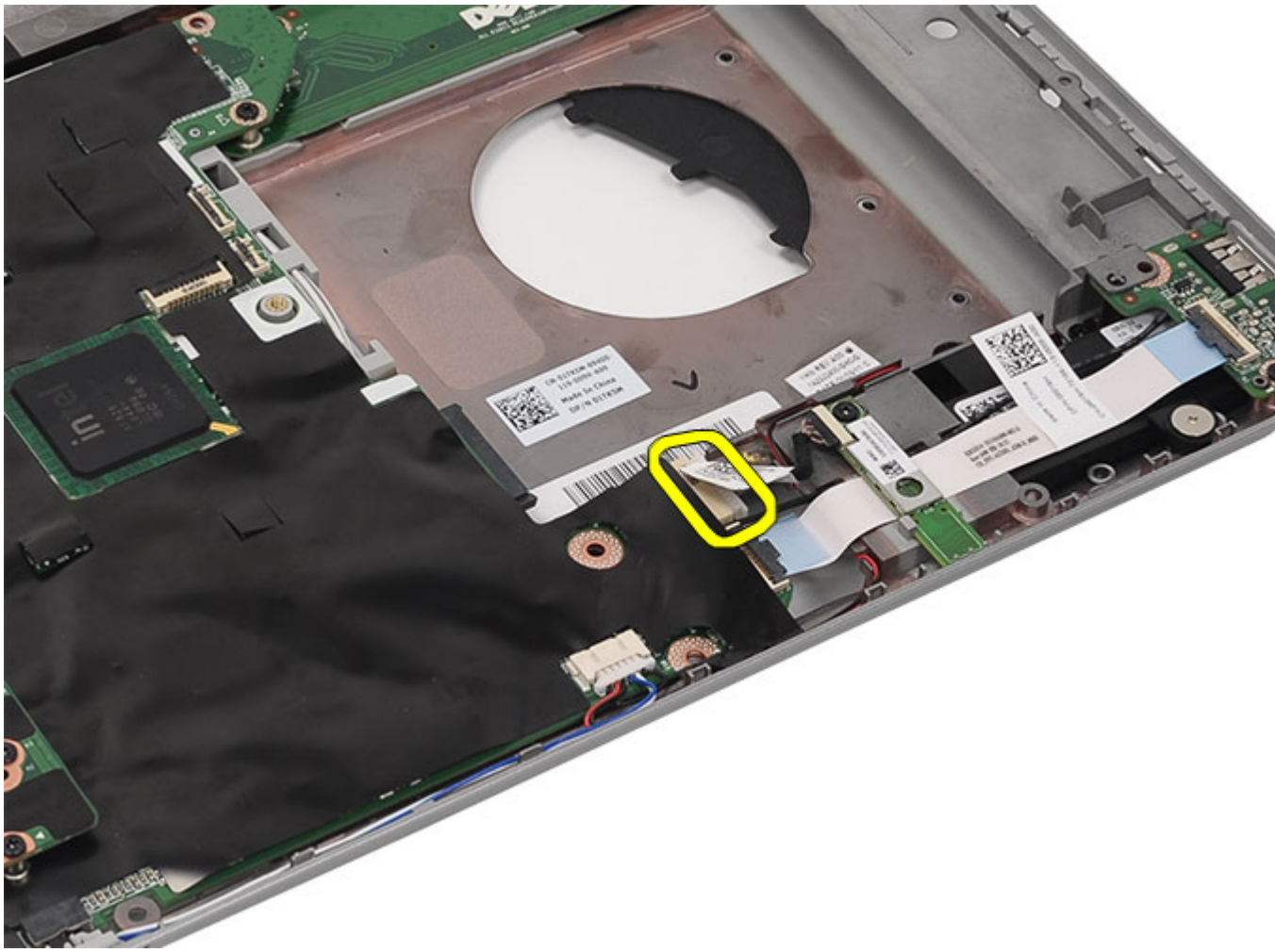
Removing the ExpressCard/Smart Card/PCMCIA Module

21

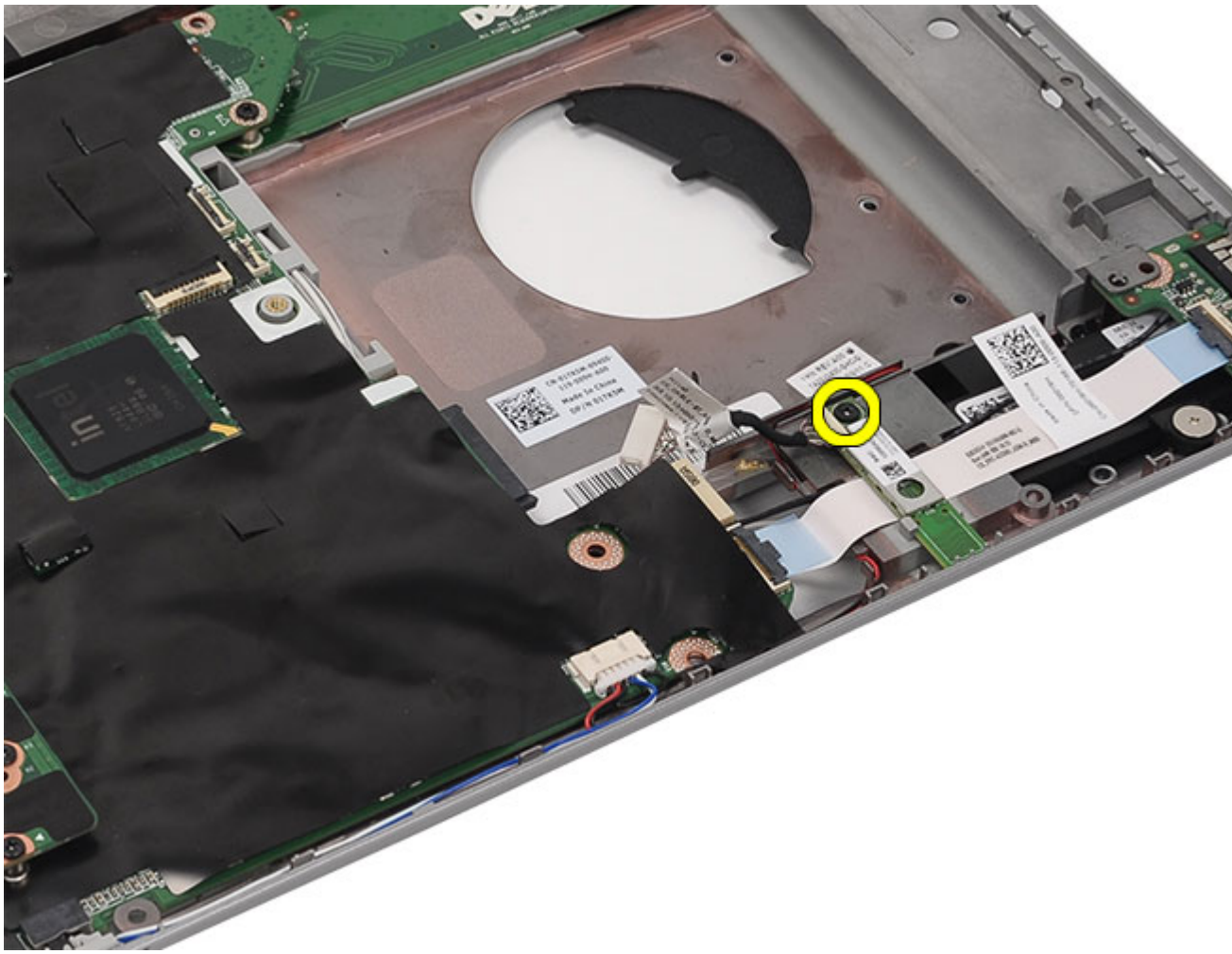
Bluetooth kartica

Removing the Bluetooth Card

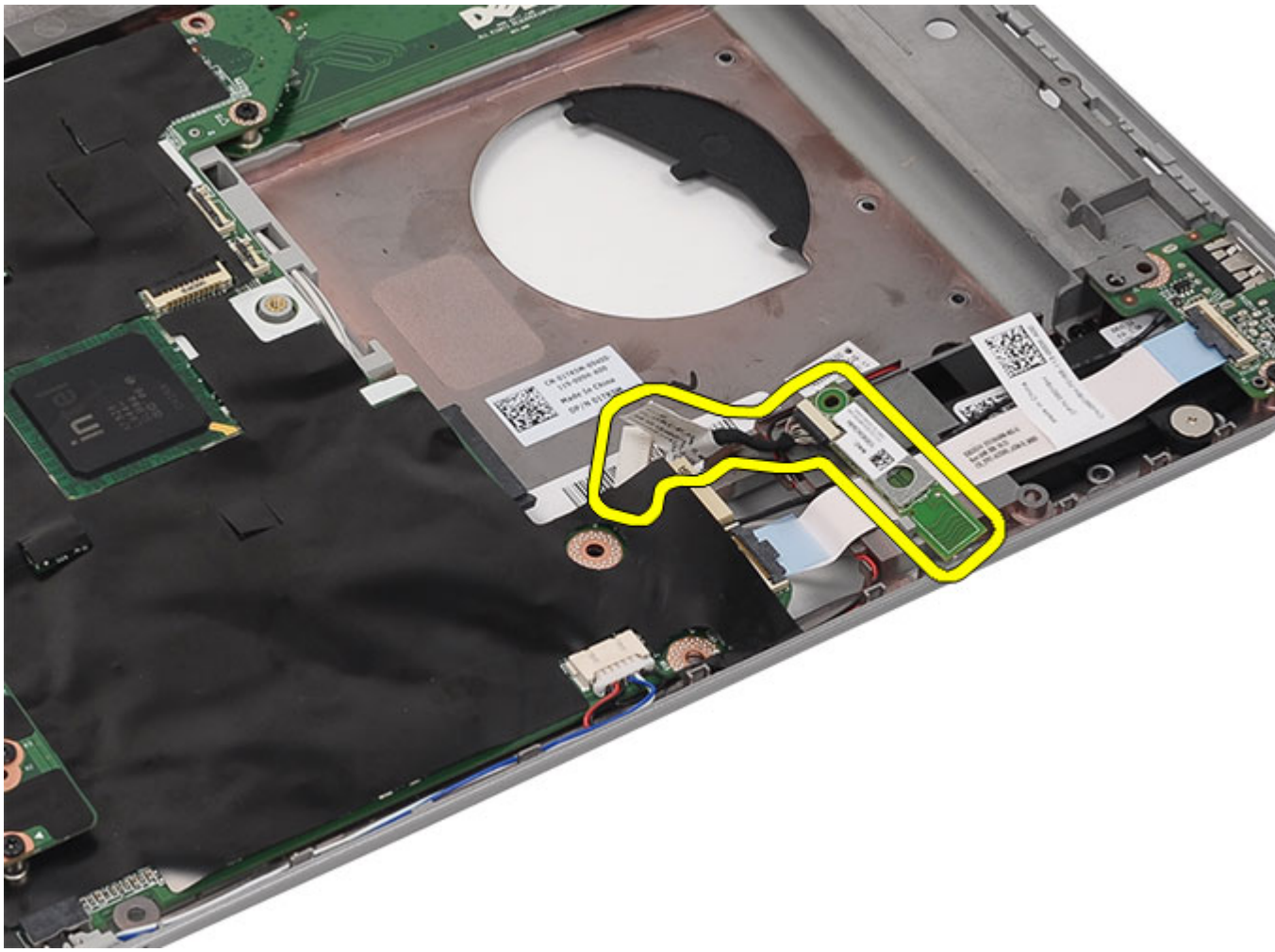
1. Follow the procedures in Before Working On Your Computer.
2. Remove the battery.
3. Remove the back panel.
4. Remove the keyboard trim
5. Remove the keyboard.
6. Remove the optical drive.
7. Remove the CPU door.
8. Remove the palm rest.
9. Disconnect the Bluetooth cable from the system board.



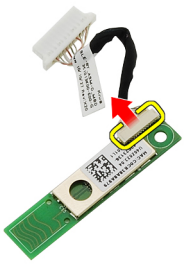
10. Remove the screw that secures the Bluetooth card.



11. Remove the Bluetooth card.



12. Disconnect the Bluetooth cable from the Bluetooth card.



Related Links

Installing the Bluetooth Card.

Installing the Bluetooth Card

1. Connect the Bluetooth cable to the Bluetooth module.
2. Place the Bluetooth module in the computer.
3. Connect the Bluetooth cable to the system board.
4. Replace the palm rest.
5. Replace the CPU door.
6. Replace the keyboard.
7. Replace the keyboard trim.
8. Replace the optical drive.
9. Replace the back panel.
10. Replace the battery.
11. Follow the procedures in After Working Inside Your Computer.

Related Links

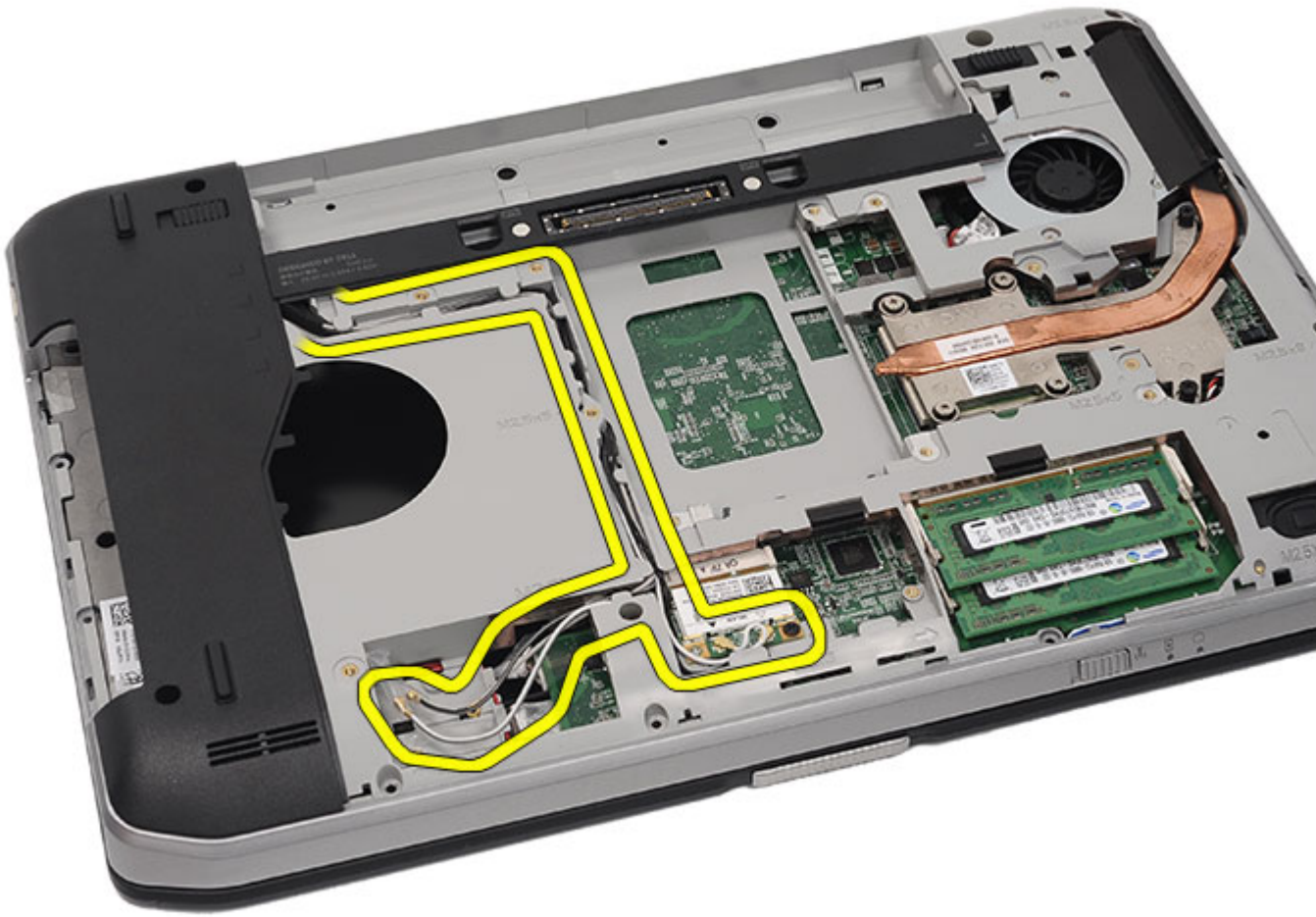
Removing the Bluetooth Card

22

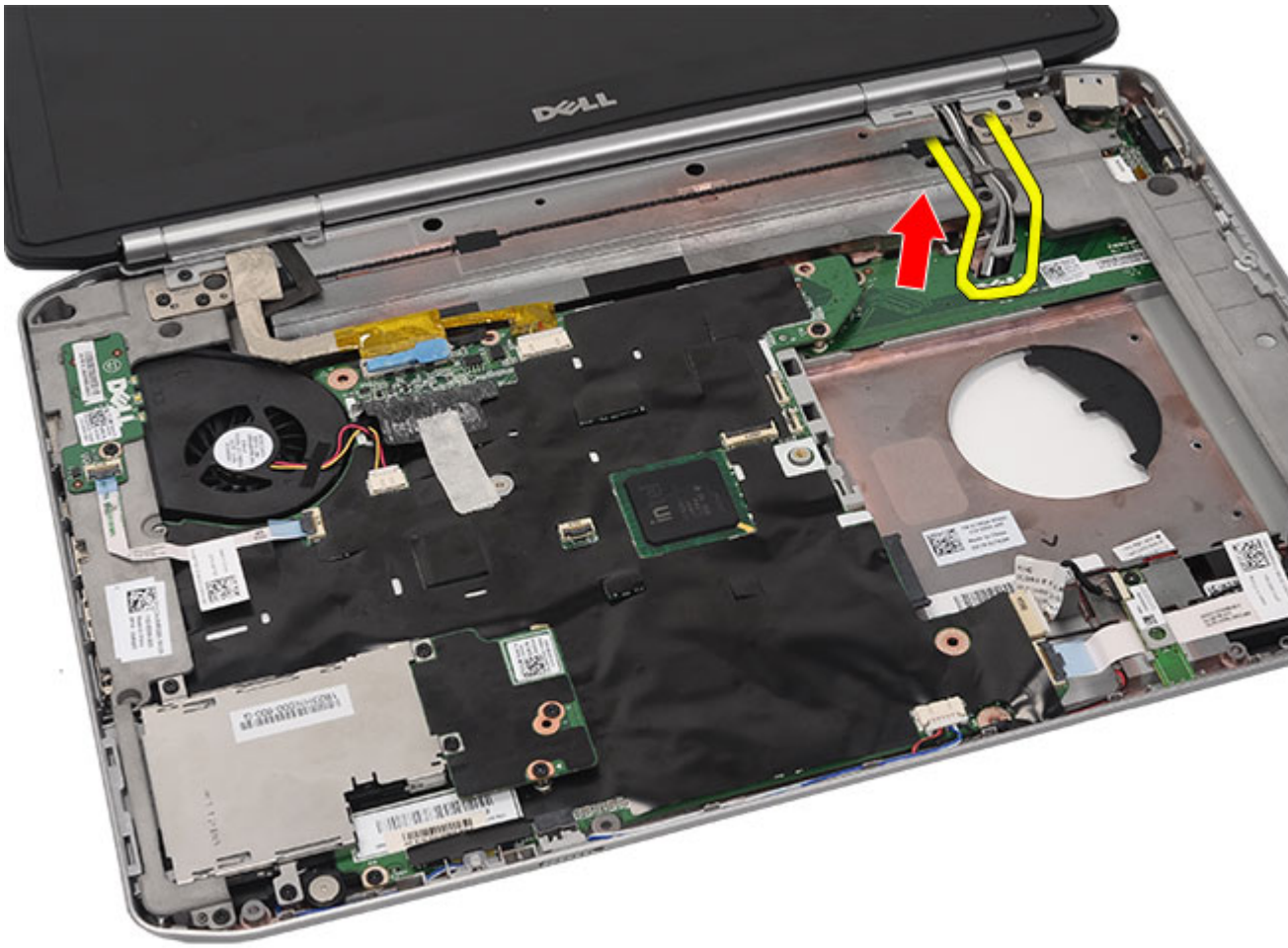
Sklop ekrana

Removing the Display Assembly

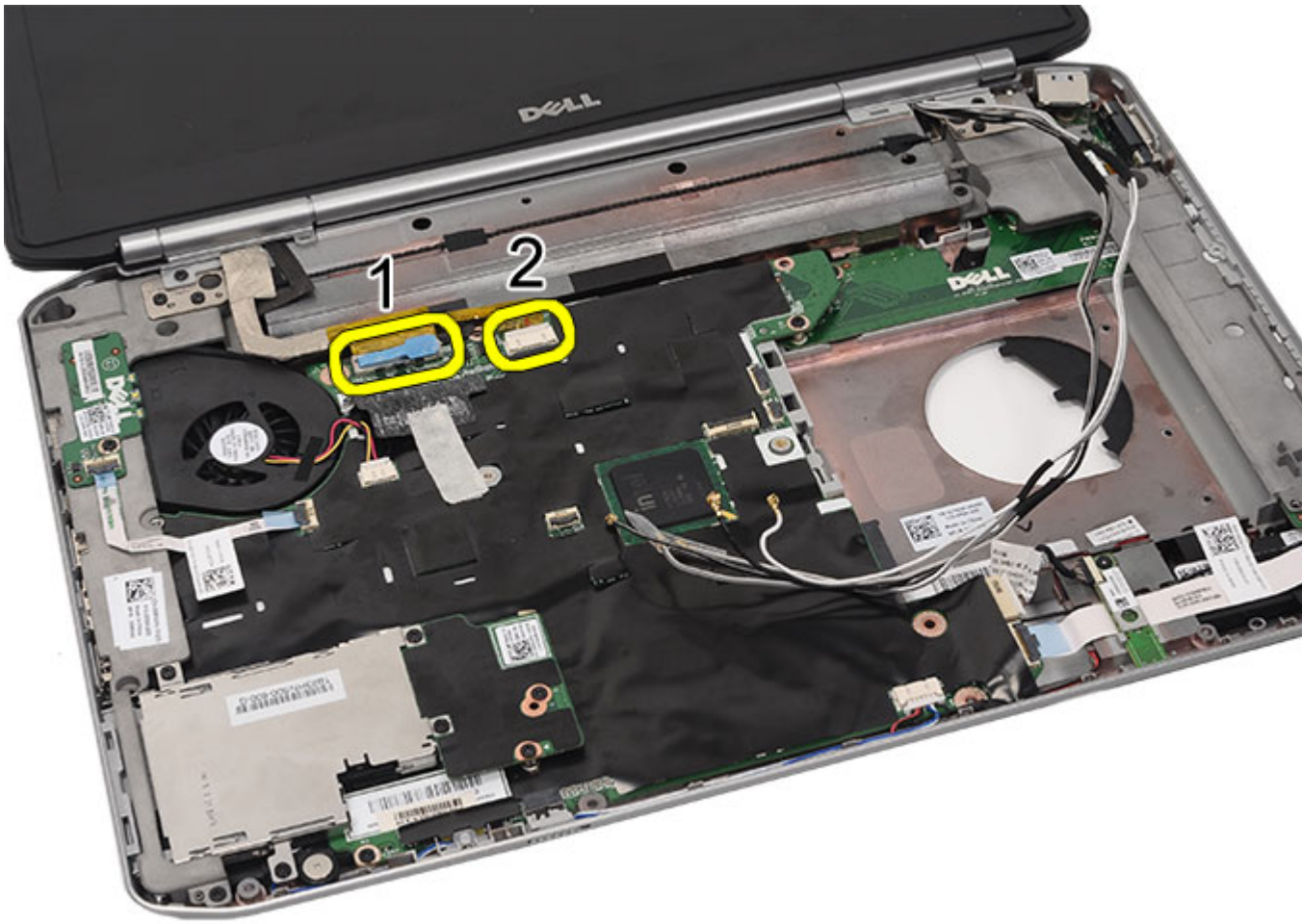
1. Follow the procedures in Before Working On Your Computer.
2. Remove the battery.
3. Remove the back panel.
4. Remove the keyboard trim.
5. Remove the keyboard.
6. Remove the optical drive.
7. Remove the hard drive.
8. Remove the CPU door.
9. Remove the palm rest.
10. Disconnect the antenna cables connected to the WLAN/WWAN cards.



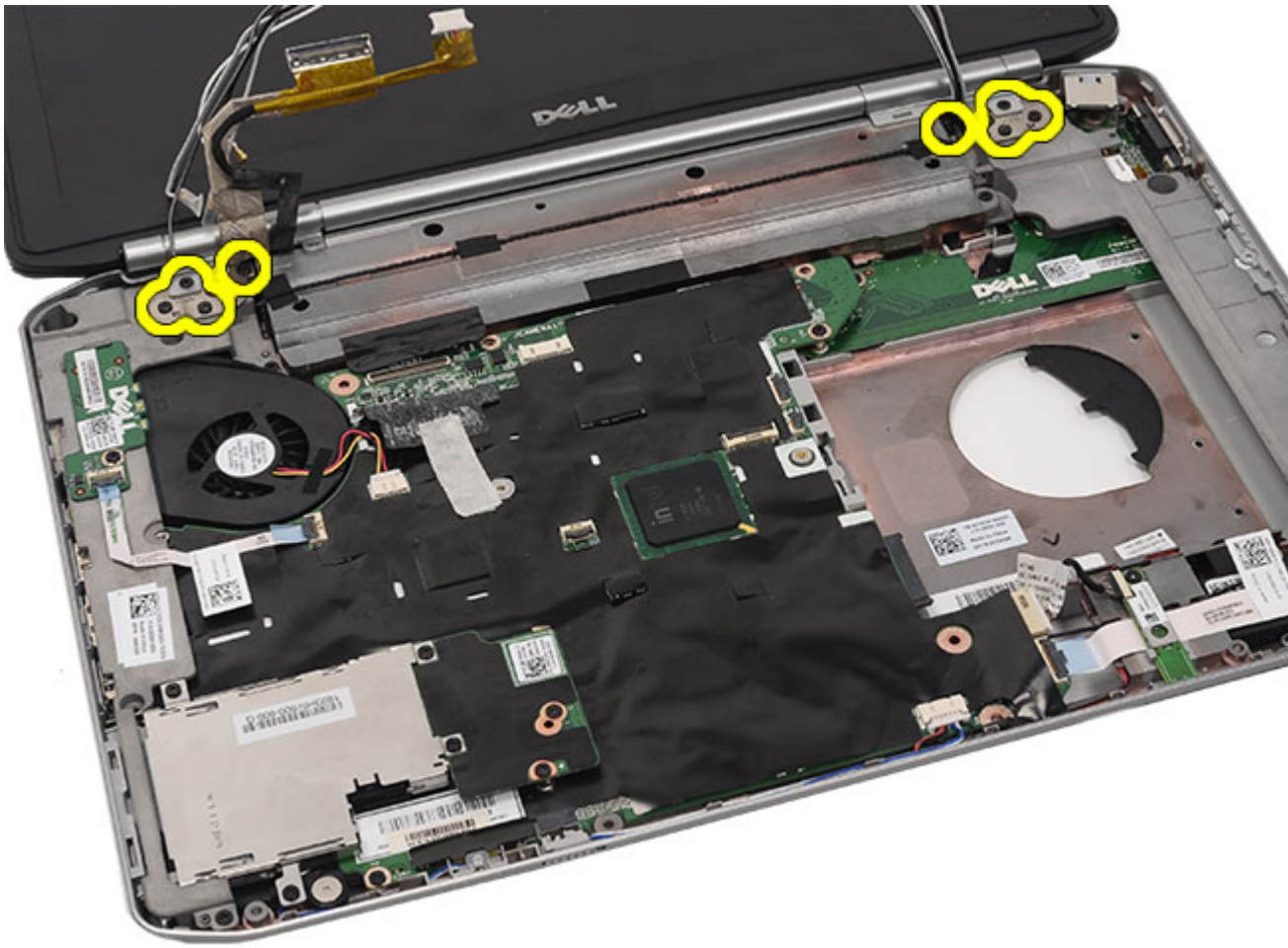
11. Remove the antenna cables from the routing channels.



12. Disconnect the low-voltage differential (LVDS) and the camera cables.



13. Remove the screws that secure the display assembly to the computer.



14. Remove the display assembly.

Related Links

Installing the Display Assembly

Installing the Display Assembly

1. Attach the display assembly to the base of the computer.
2. Tighten the screws to secure the display assembly.
3. Connect the low-voltage differential (LVDS) cable to the system board.
4. Connect the camera cable to the system board connector.
5. Push the antenna cables through the opening of the bottom of the computer.
6. Secure the antenna cables to the routing channels.
7. Connect the antenna cables to the WLAN/WLAN cards.
8. Replace the palm rest.
9. Replace the CPU door.
10. Replace the keyboard.
11. Replace the keyboard trim.

12. Replace the hard drive.
13. Replace the optical drive.
14. Replace the back panel.
15. Replace the battery.
16. Follow the procedures in After Working Inside Your Computer.

Related Links

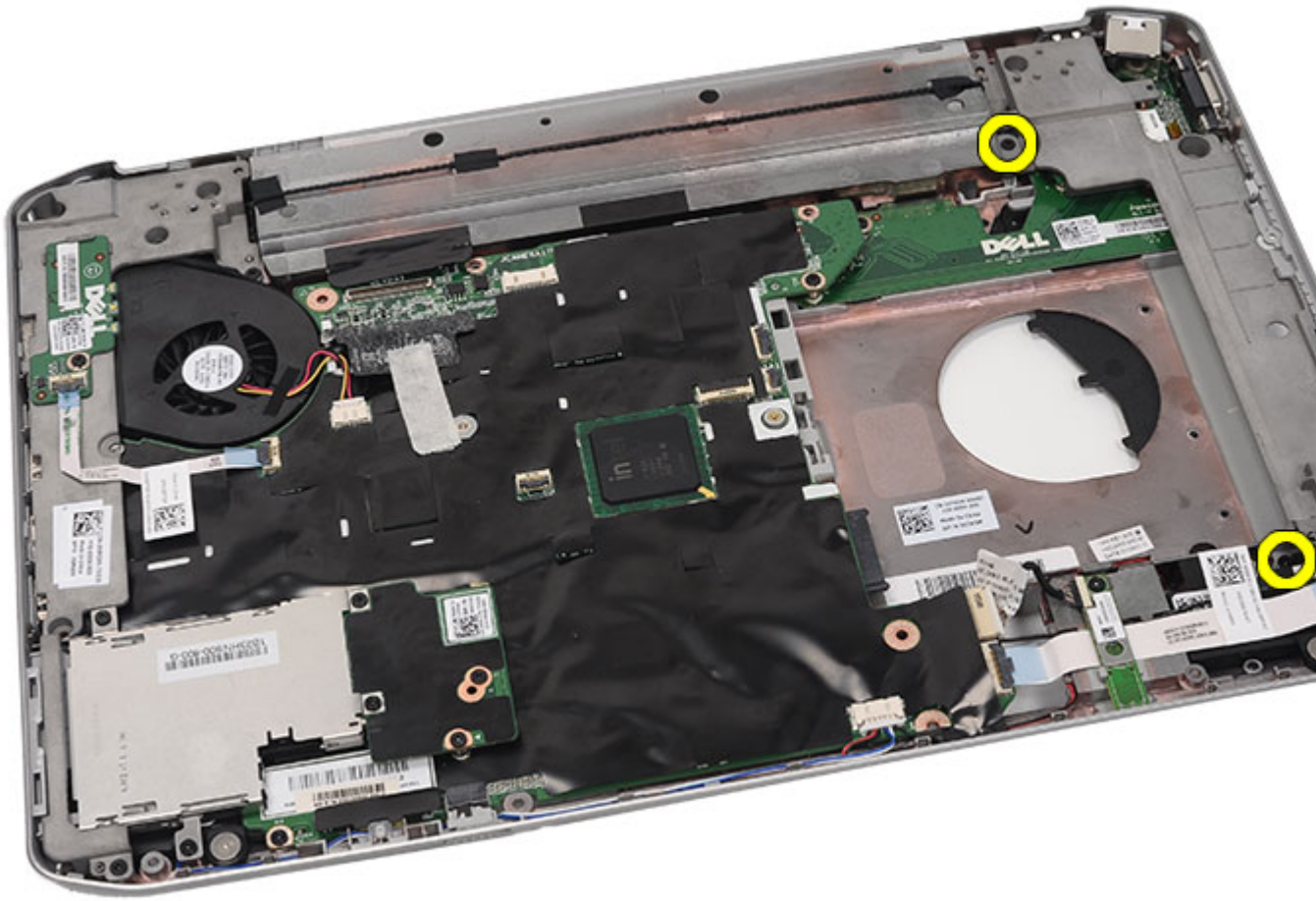
Removing the Display Assembly

23

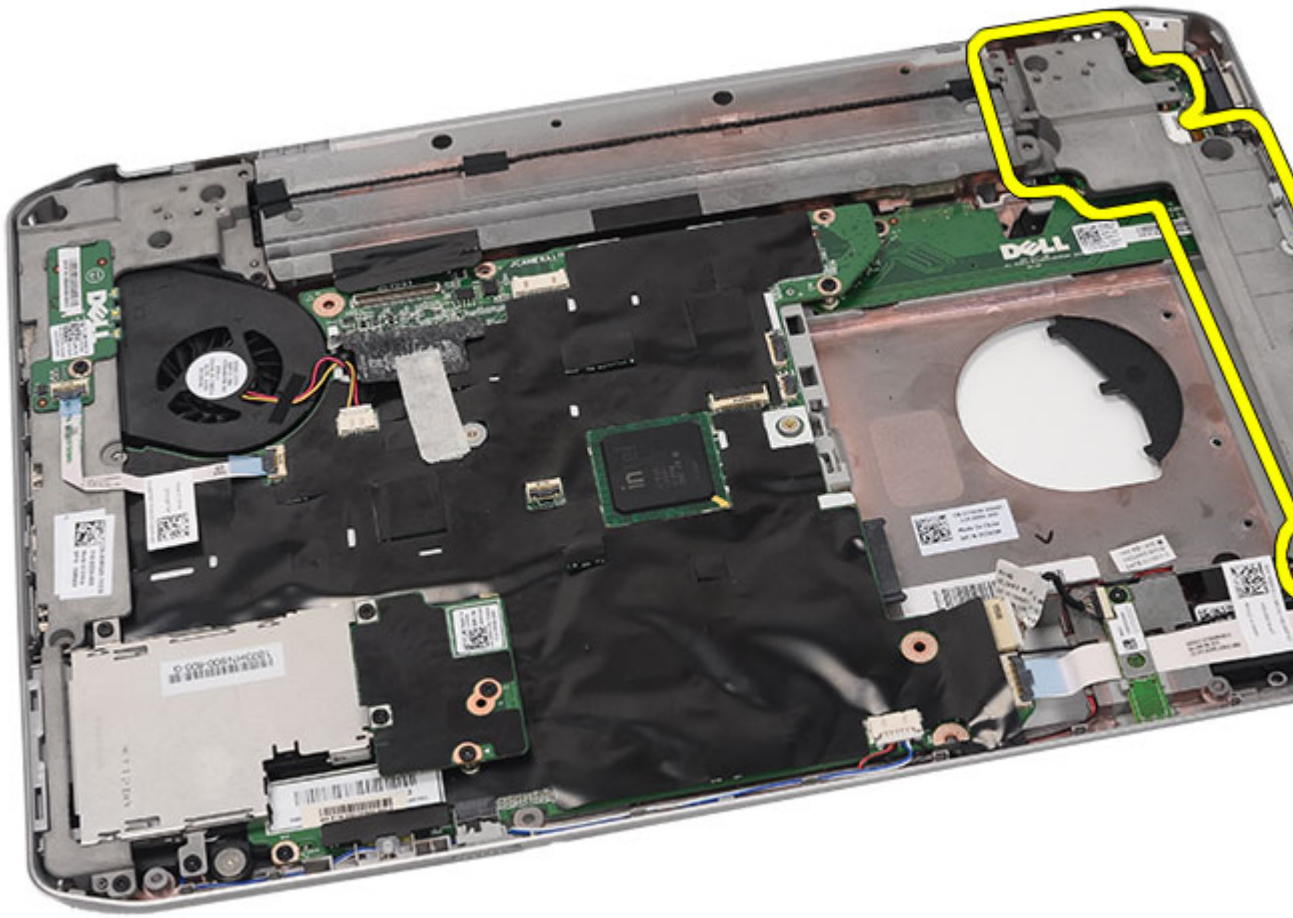
Brackets

Removing the Support Brackets

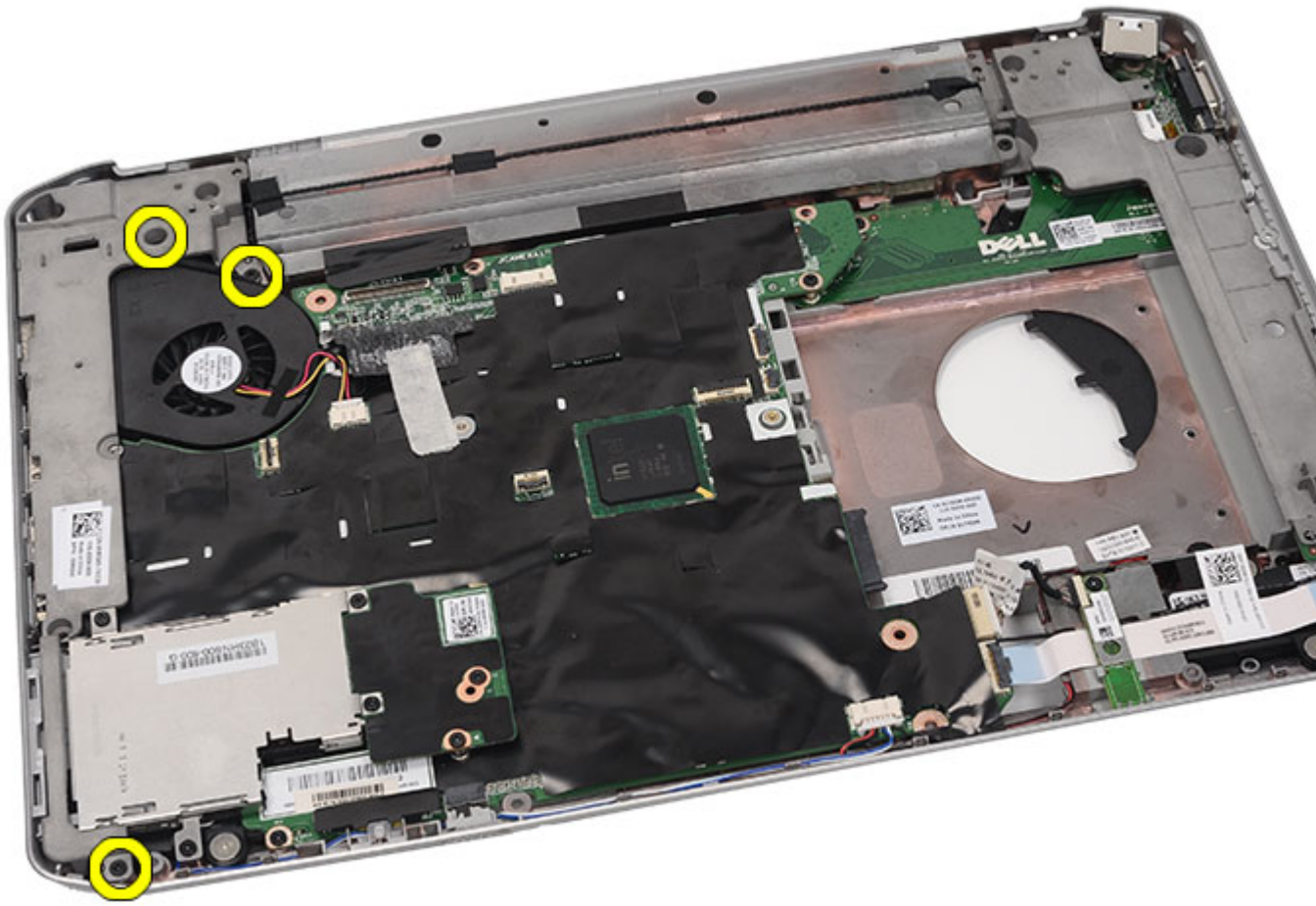
1. Follow the procedures in Before Working On Your Computer.
2. Remove the battery.
3. Remove the back panel.
4. Remove the keyboard trim.
5. Remove the keyboard.
6. Remove the optical drive.
7. Remove the CPU door.
8. Remove the palm rest.
9. Remove the display assembly.
10. Remove the screws that secure the right support bracket.



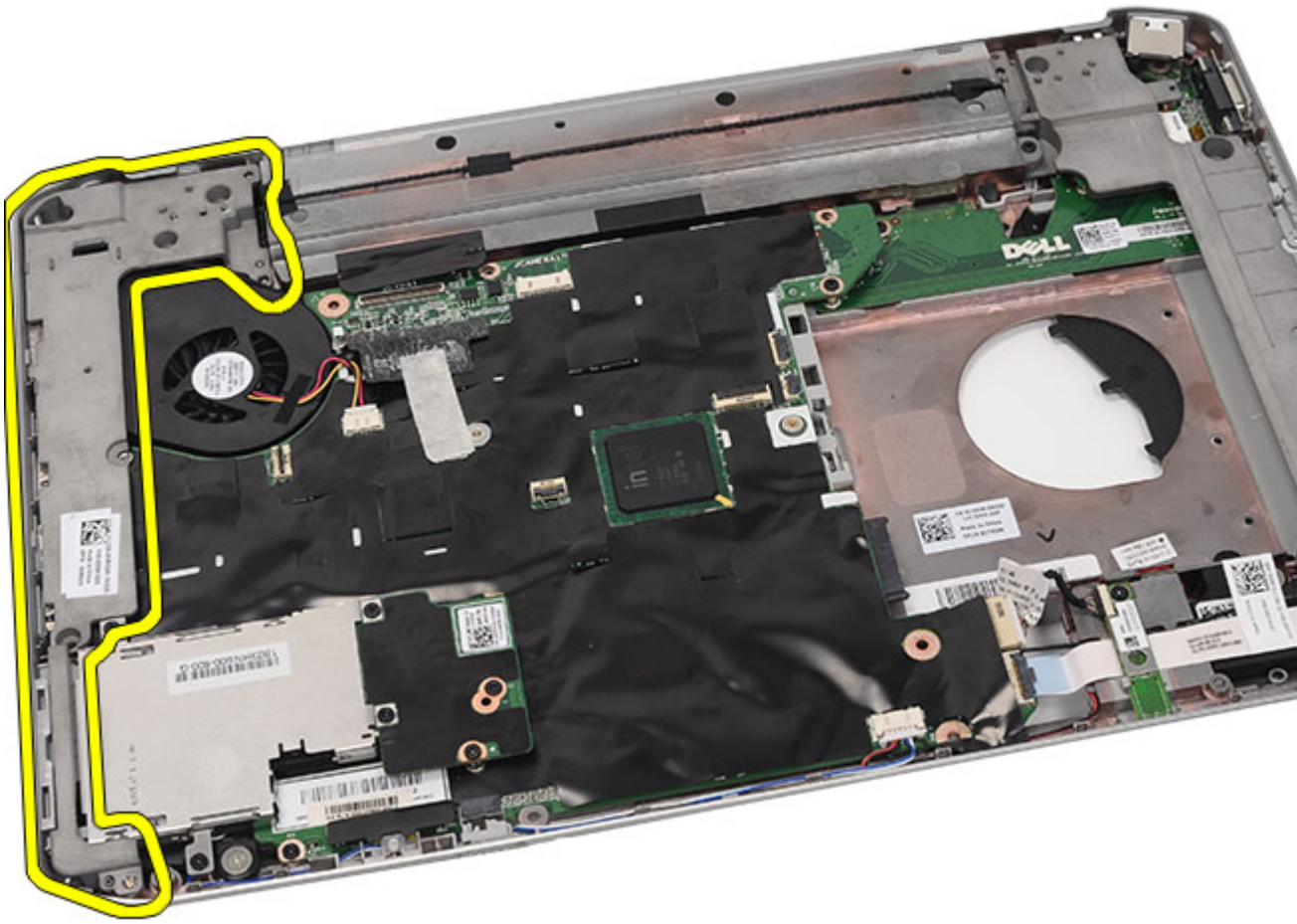
11. Remove the right support bracket.



12. Remove the screws that secure the left support bracket.



13. Remove the left support bracket.



Related Links

Installing the Support Brackets

Installing the Support Brackets

1. Place the right support bracket in the computer.
2. Tighten the screws to secure the right support bracket.
3. Place the left support bracket in the computer.
4. Tighten the screws to secure the left support bracket.
5. Replace the display assembly.
6. Replace the palm rest.
7. Replace the LED board.
8. Replace the CPU door.
9. Replace the keyboard.
10. Replace the keyboard trim.
11. Replace the optical drive.

12. Replace the back panel.
13. Replace the battery.
14. Follow the procedures in After Working Inside Your Computer.

Related Links

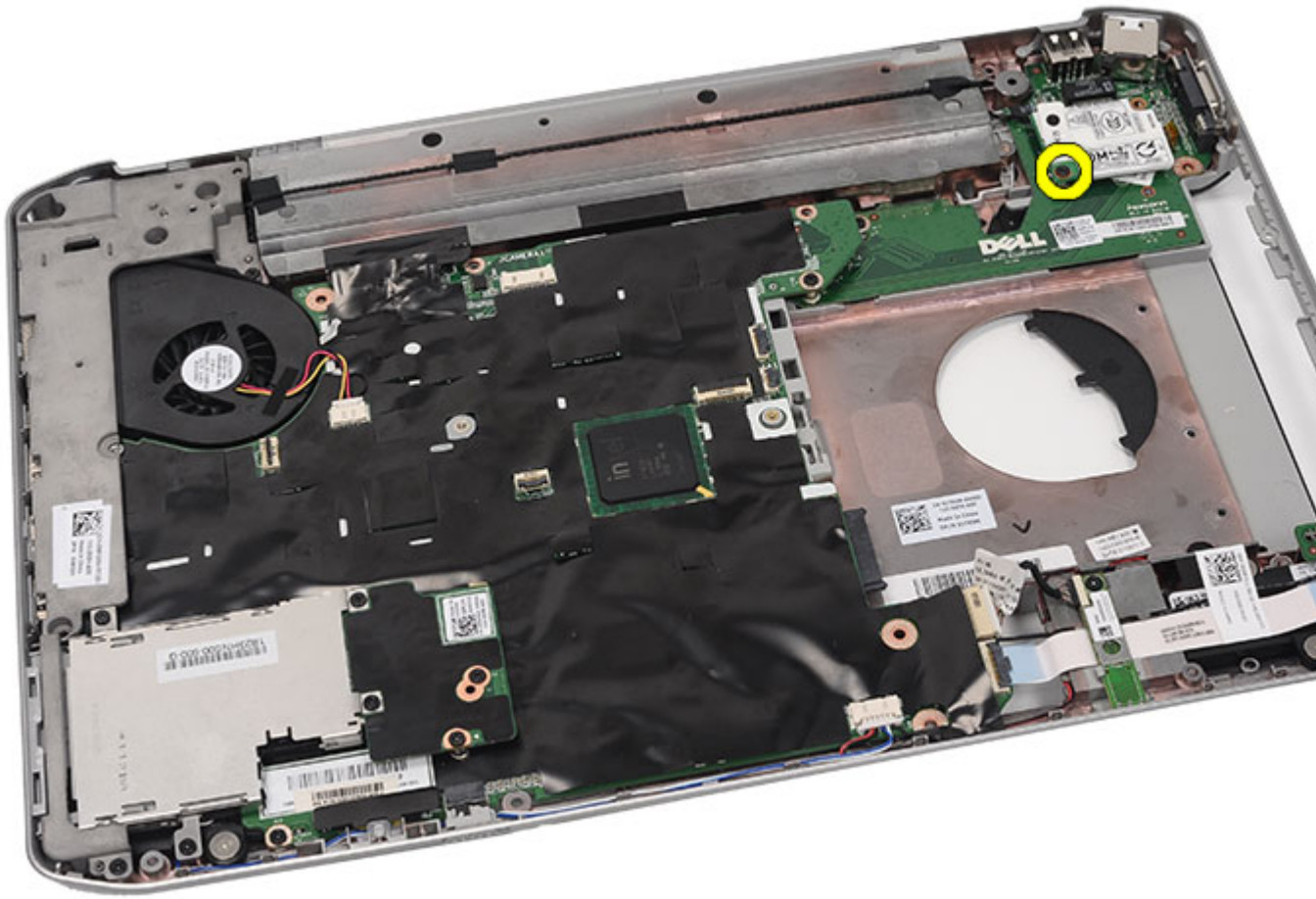
Removing the Support Brackets

24

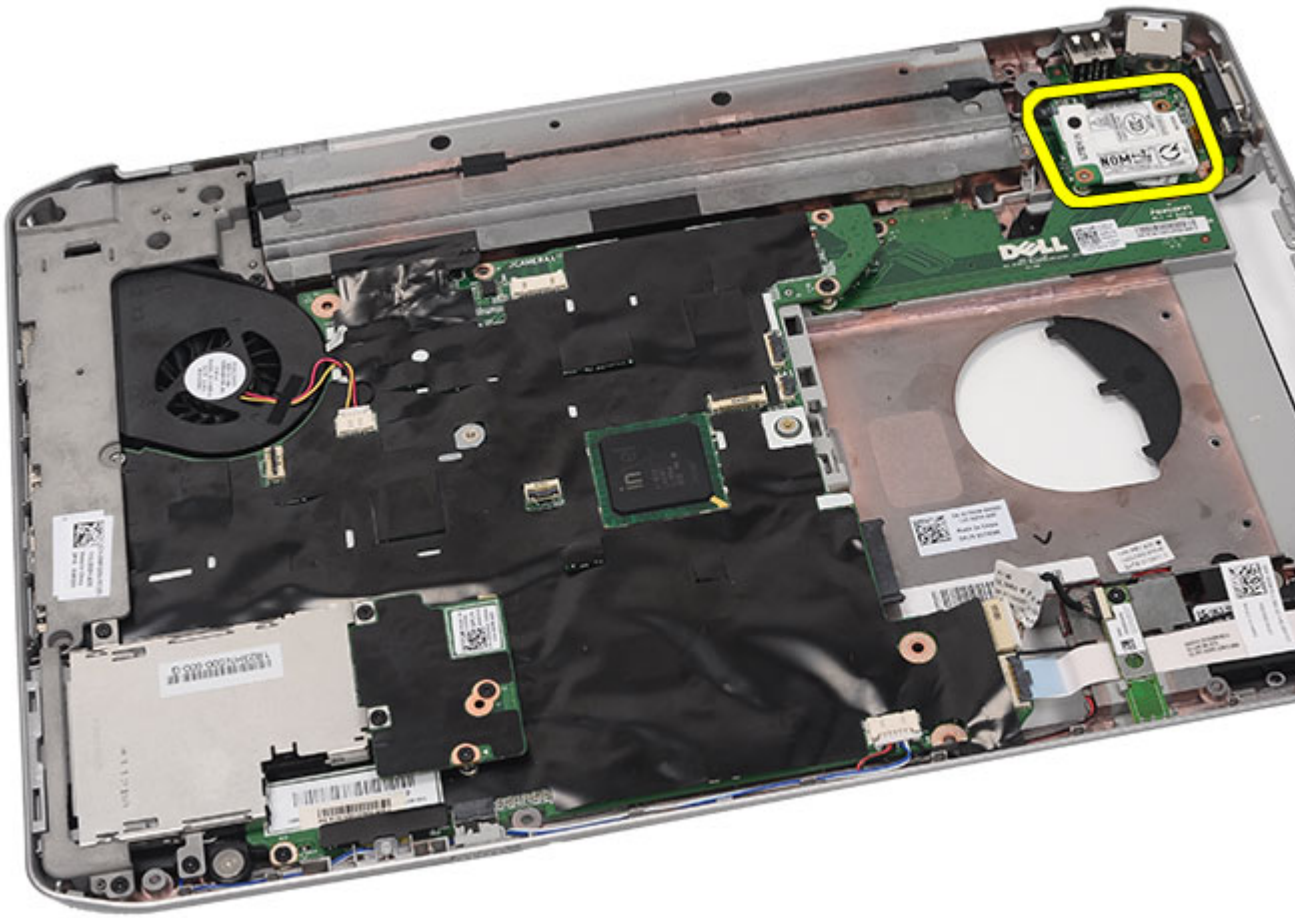
Modemska kartica

Removing the Modem Card

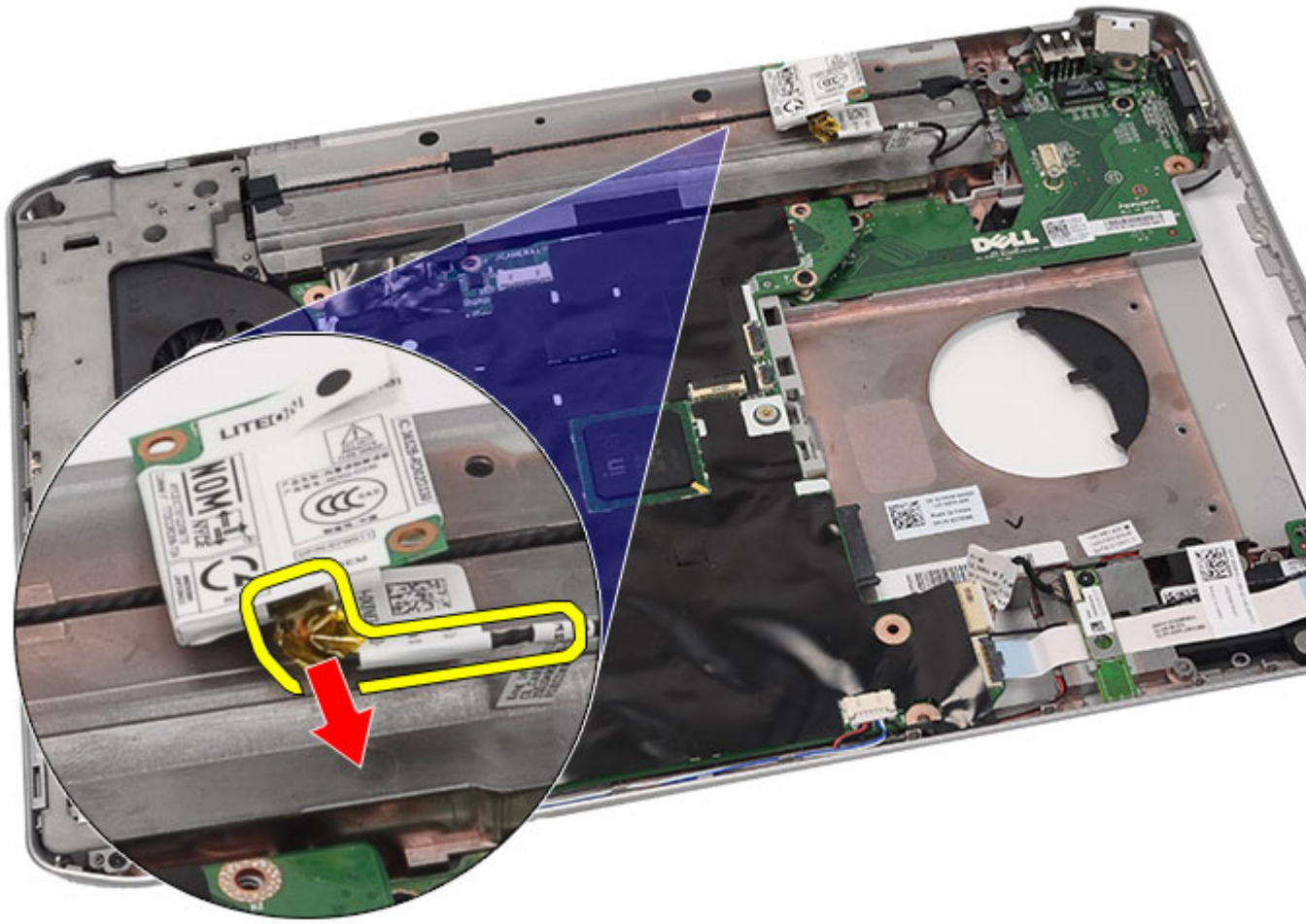
1. Follow the procedures in Before Working On Your Computer.
2. Remove the battery.
3. Remove the back panel.
4. Remove the keyboard trim.
5. Remove the keyboard.
6. Remove the optical drive.
7. Remove the hard drive
8. Remove the CPU door.
9. Remove the palm rest.
10. Remove the display assembly.
11. Remove the support brackets.
12. Remove the screw that secures the modem card.



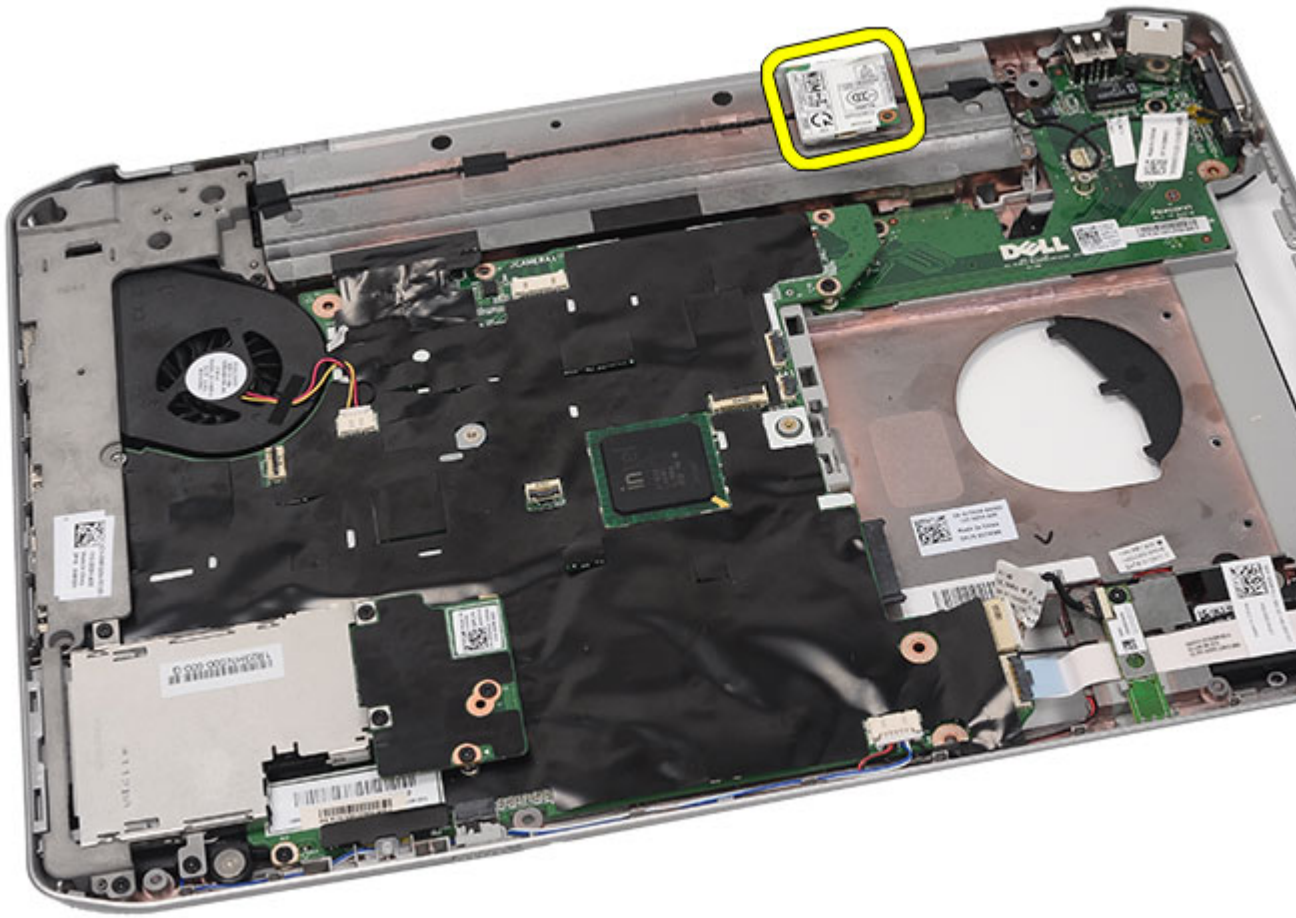
13. Lift the modem card, to disengage from the connector on the back of the card.



14. Disconnect the modem cable from the modem.



15. Remove the modem card.



Related Links

Installing the Modem Card

Installing the Modem Card

1. Connect the modem cable.
2. Attach the connector on the back of the modem card to the connector on the I/O panel.
3. Replace the support brackets.
4. Replace the display assembly.
5. Replace the palm rest.
6. Replace the CPU door.
7. Replace the keyboard.
8. Replace the keyboard trim
9. Replace the optical drive.
10. Replace the back panel.
11. Replace the battery.

12. Follow the procedures in After Working Inside Your Computer.

Related Links

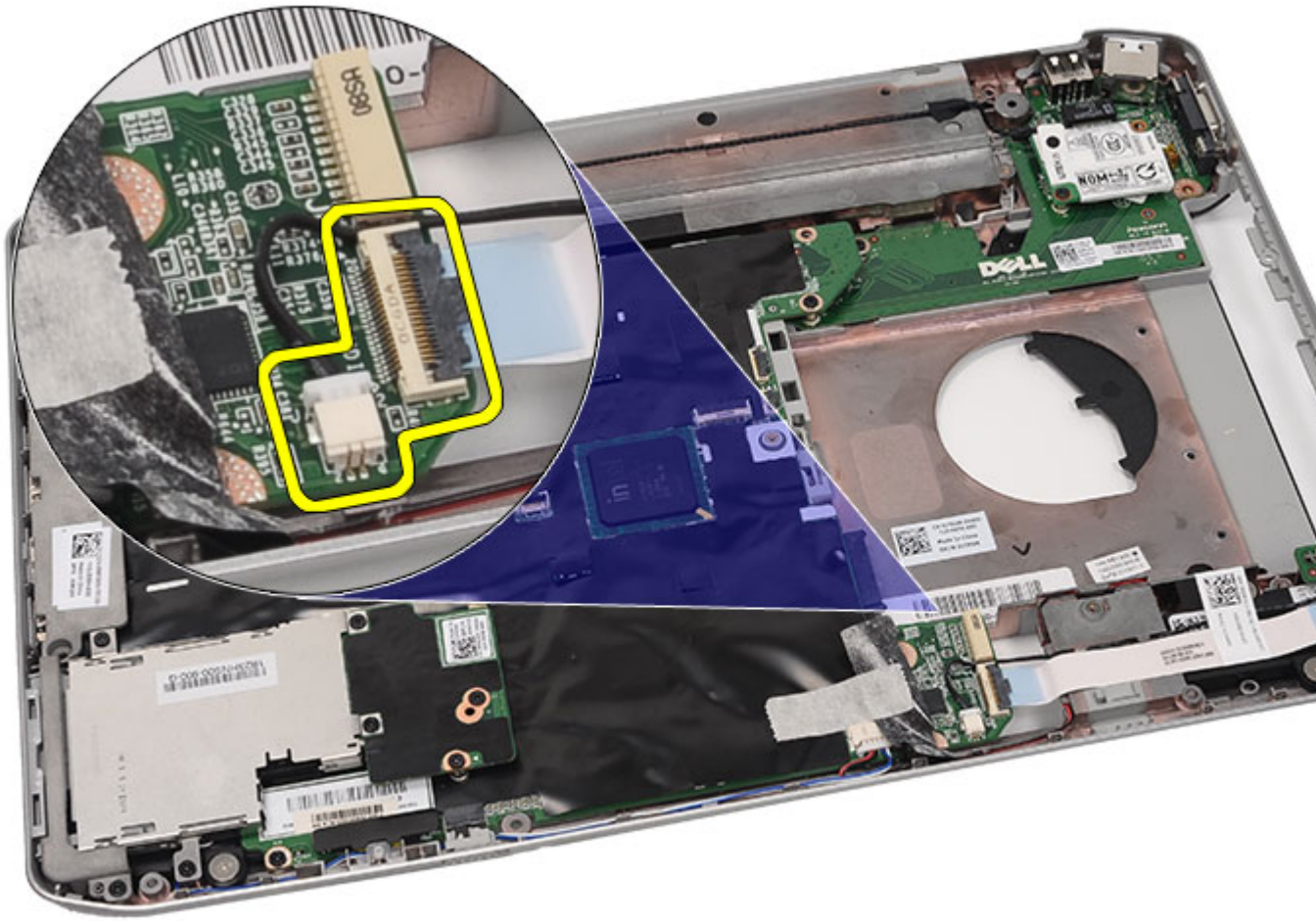
Removing the Modem Card

25

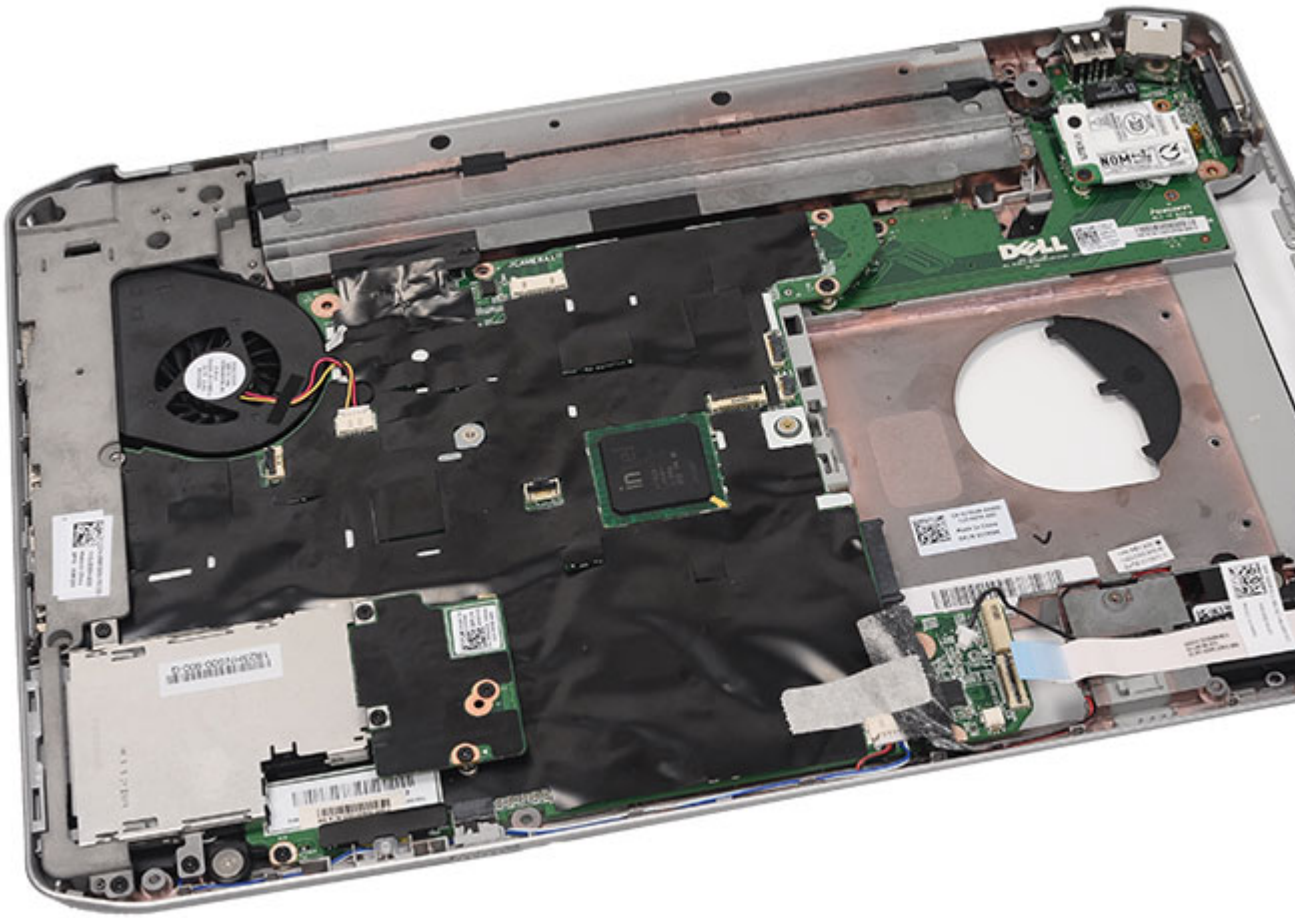
Audio Board

Removing the Audio Board

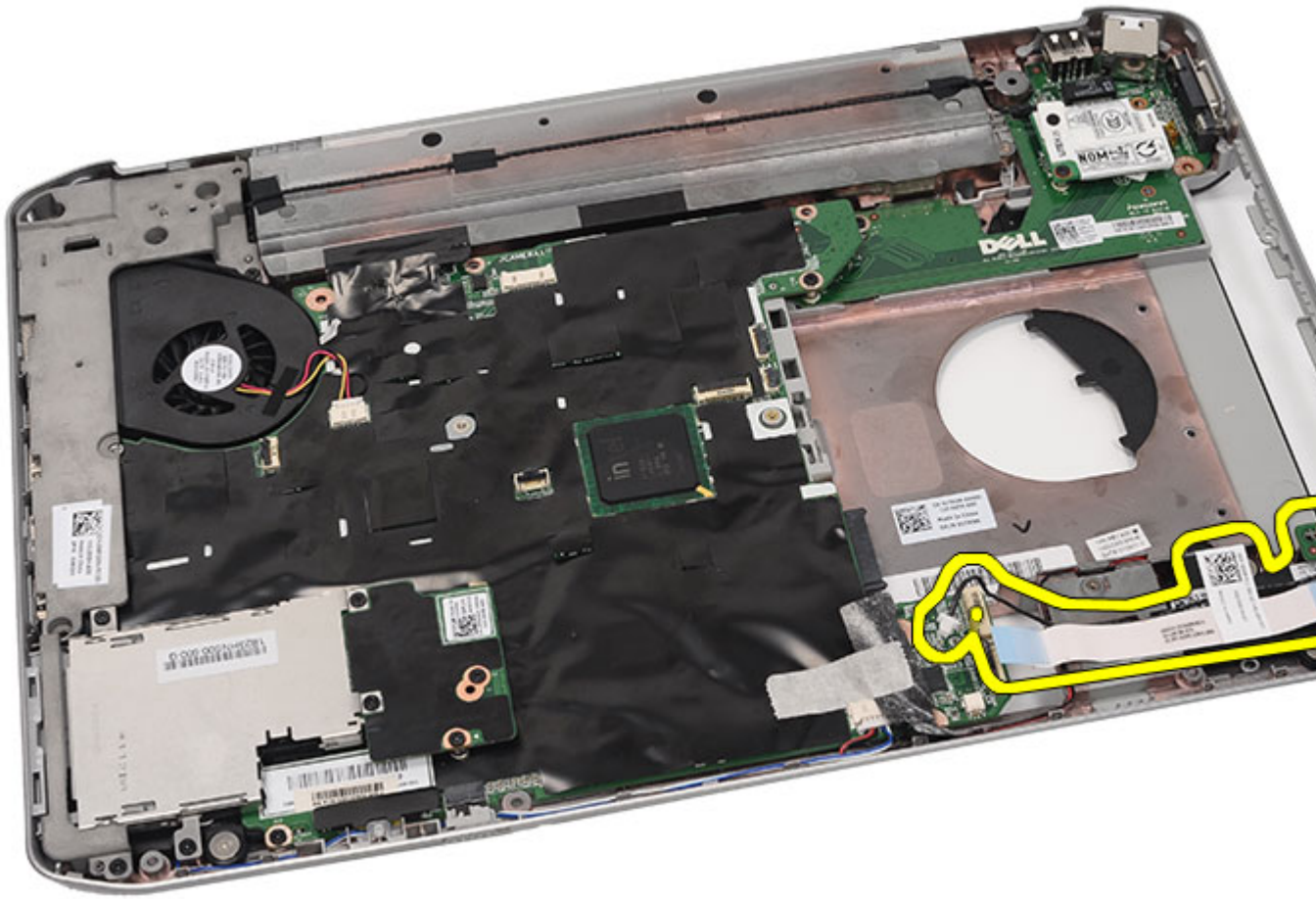
1. Follow the procedures in Before Working On Your Computer.
2. Remove the battery.
3. Remove the back panel.
4. Remove the keyboard trim.
5. Remove the keyboard.
6. Remove the optical drive.
7. Remove the CPU door.
8. Remove the palm rest.
9. Remove the Bluetooth card.
10. Disconnect the audio board cables from the system board.



11. Remove the screw that secures the audio board to the computer.



12. Remove the audio board.



Related Links

Installing the Audio Board

Installing the Audio Board

1. Place the audio board in the computer.
2. Tighten the screw to secure the audio board.
3. Connect the audio cables to the system board.
4. Replace the Bluetooth card.
5. Replace the palm rest.
6. Replace the CPU door.
7. Replace the keyboard.
8. Replace the keyboard trim.
9. Replace the optical drive.
10. Replace the back panel.
11. Replace the battery.

12. Follow the procedures in After Working Inside Your Computer.

Related Links

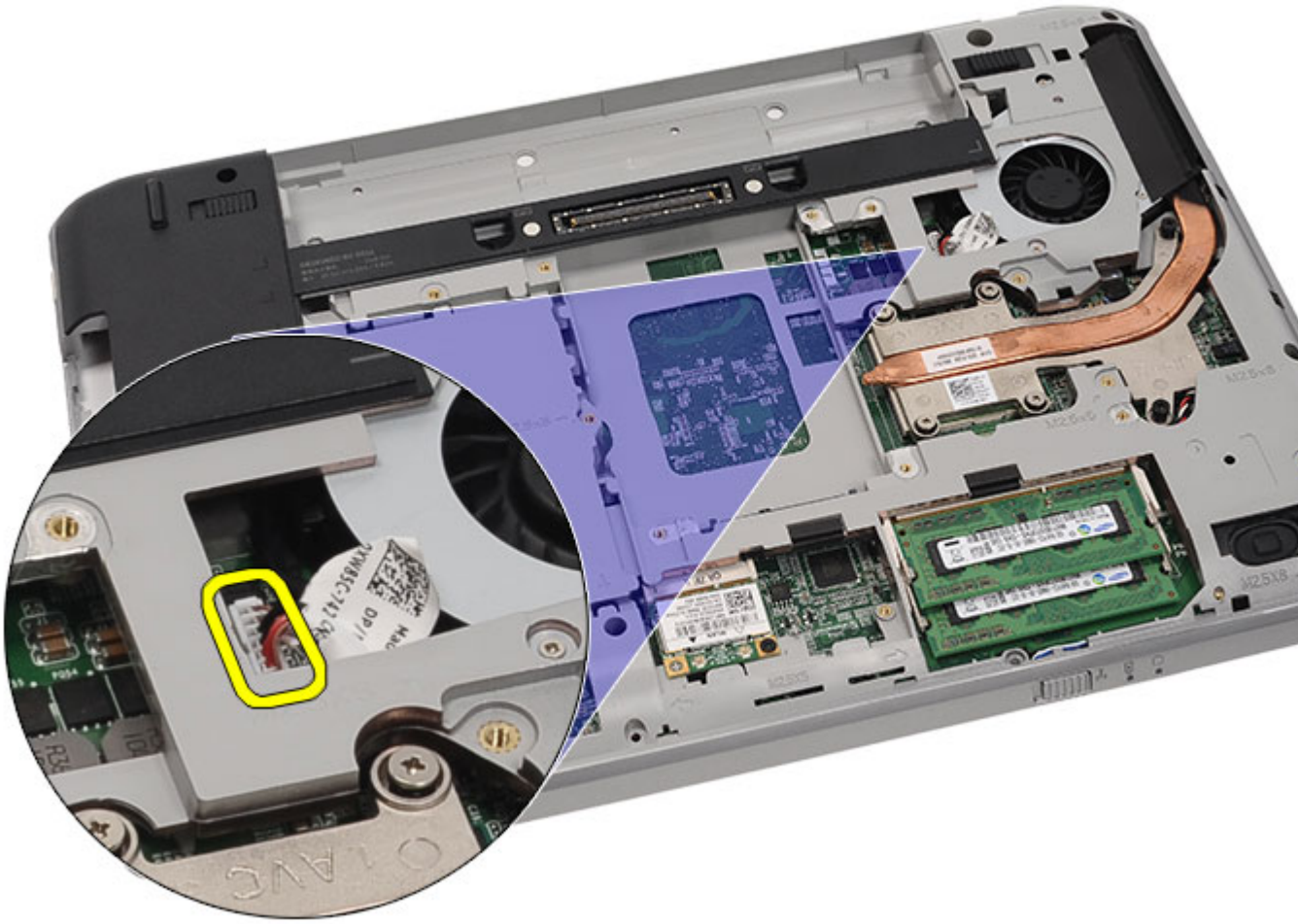
Removing the Audio Board

26

Matična ploča

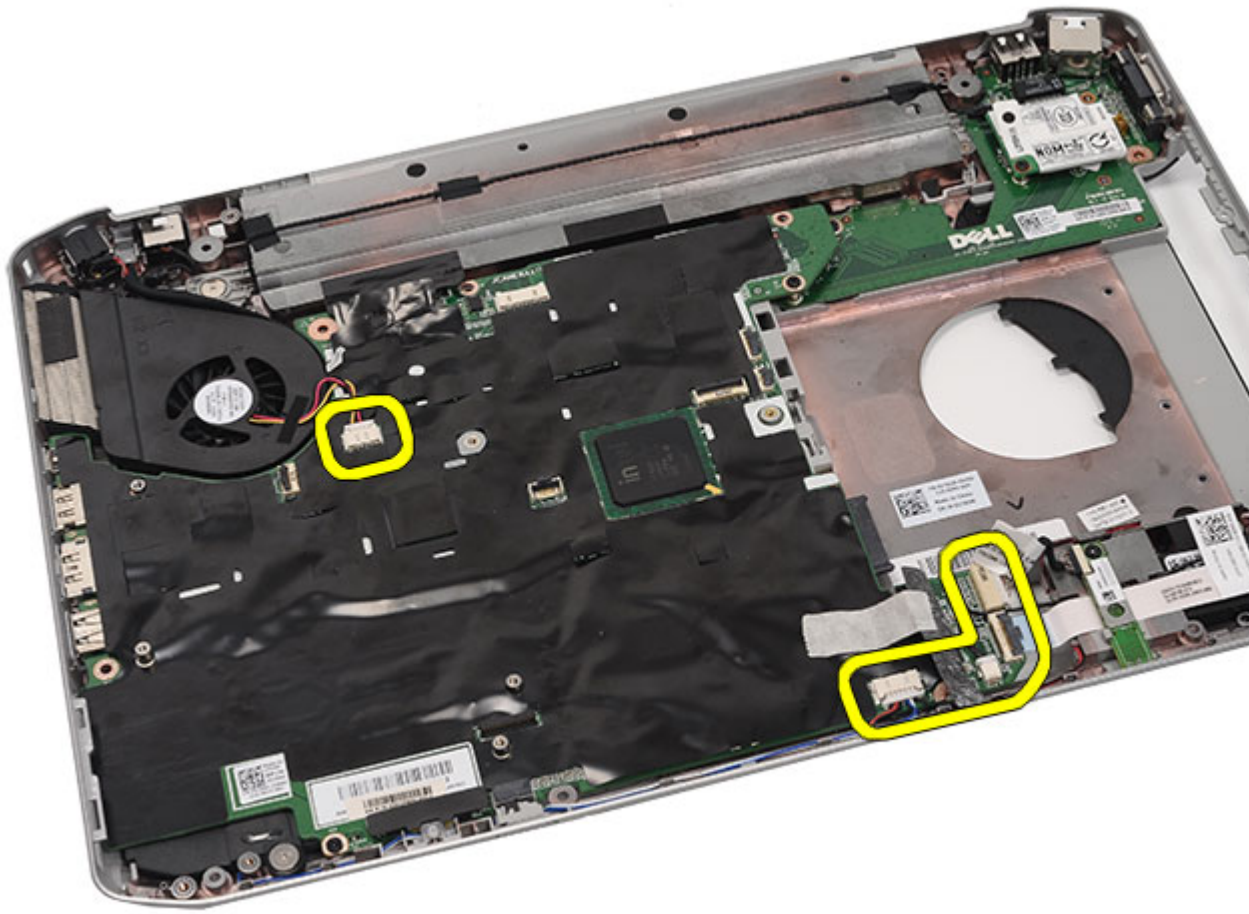
Removing the System Board

1. Follow the procedures in Before Working On Your Computer.
2. Remove the battery.
3. Remove the subscriber identity module (SIM) card.
4. Remove the secure digital (SD) card.
5. Remove the back panel.
6. Remove the memory.
7. Remove the keyboard trim.
8. Remove the keyboard.
9. Remove the optical drive.
10. Remove the hard drive.
11. Remove the wireless local area network (WLAN).
12. Remove the wireless wide area network (WWAN).
13. Remove the CPU door.
14. Remove the heat sink:
15. Remove the processor.
16. Remove the palm rest.
17. Remove the ExpressCard/Smart Card/PCMCIA module.
18. Remove the display assembly.
19. Remove the LED board.
20. Remove the support brackets.
21. Disconnect the power connector cable.

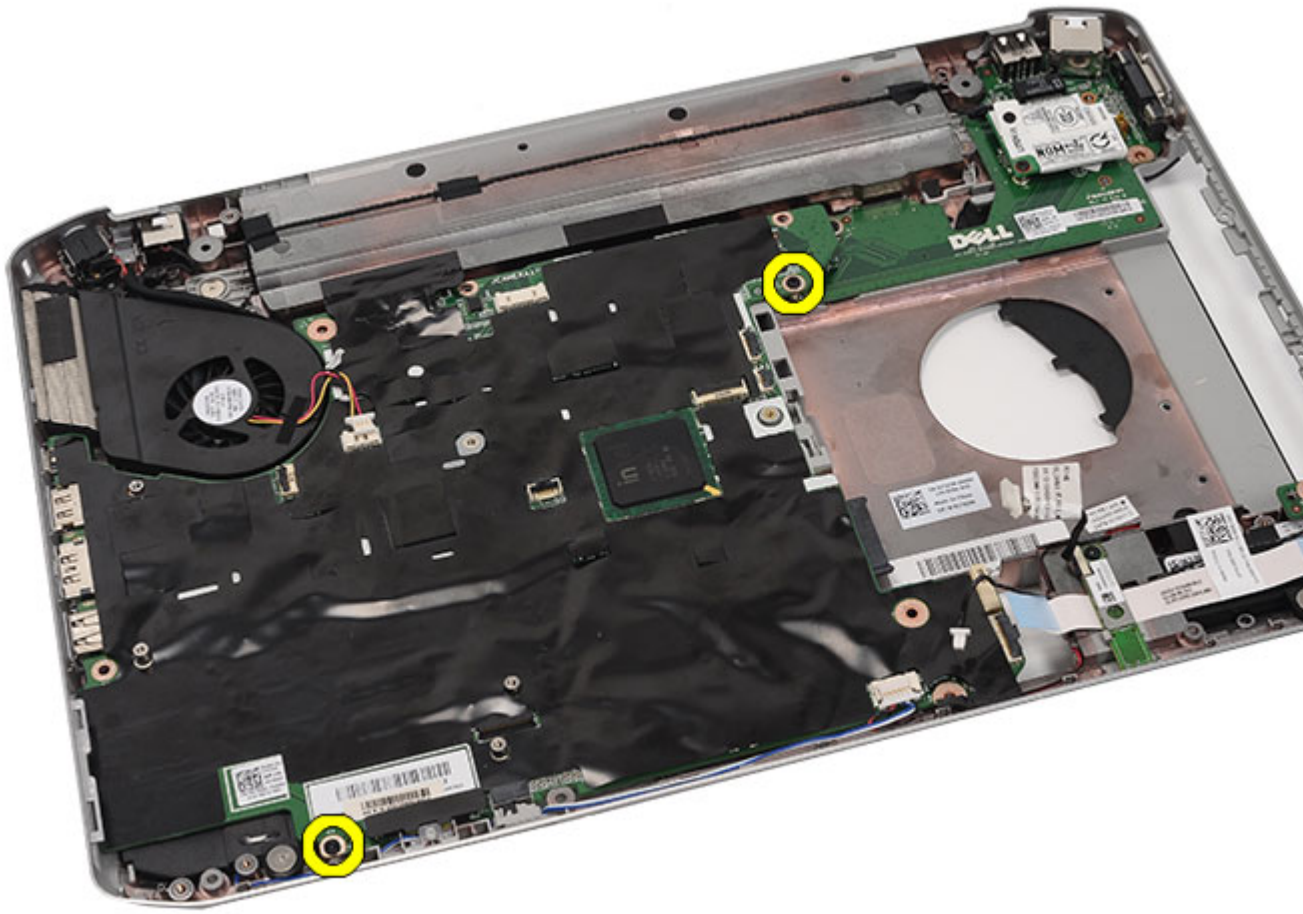


22. Disconnect the following cables from the system board:

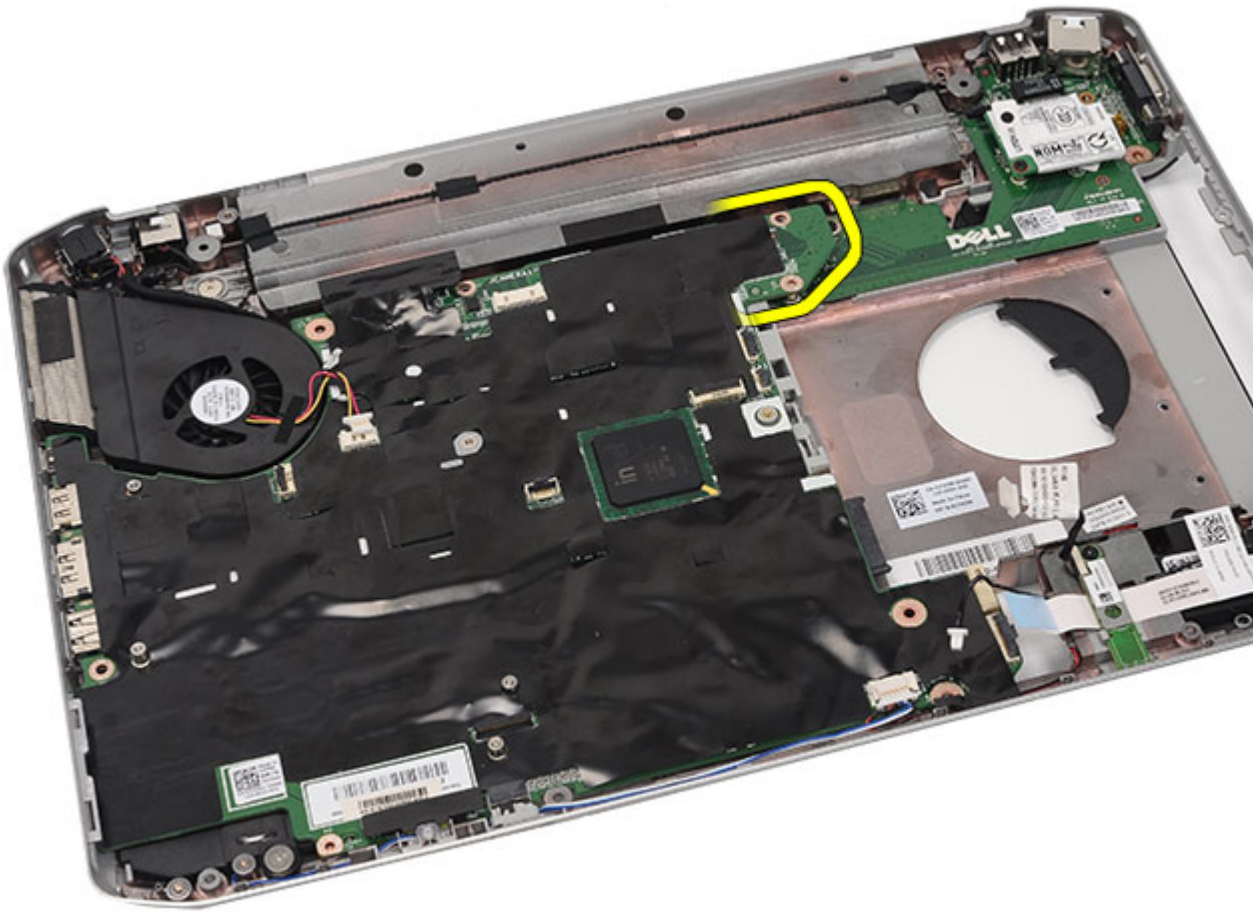
    – thermal fan cable
    – speaker cable
    – audio board cable
    – bluetooth cable



23. Remove the screws that secure the system board.

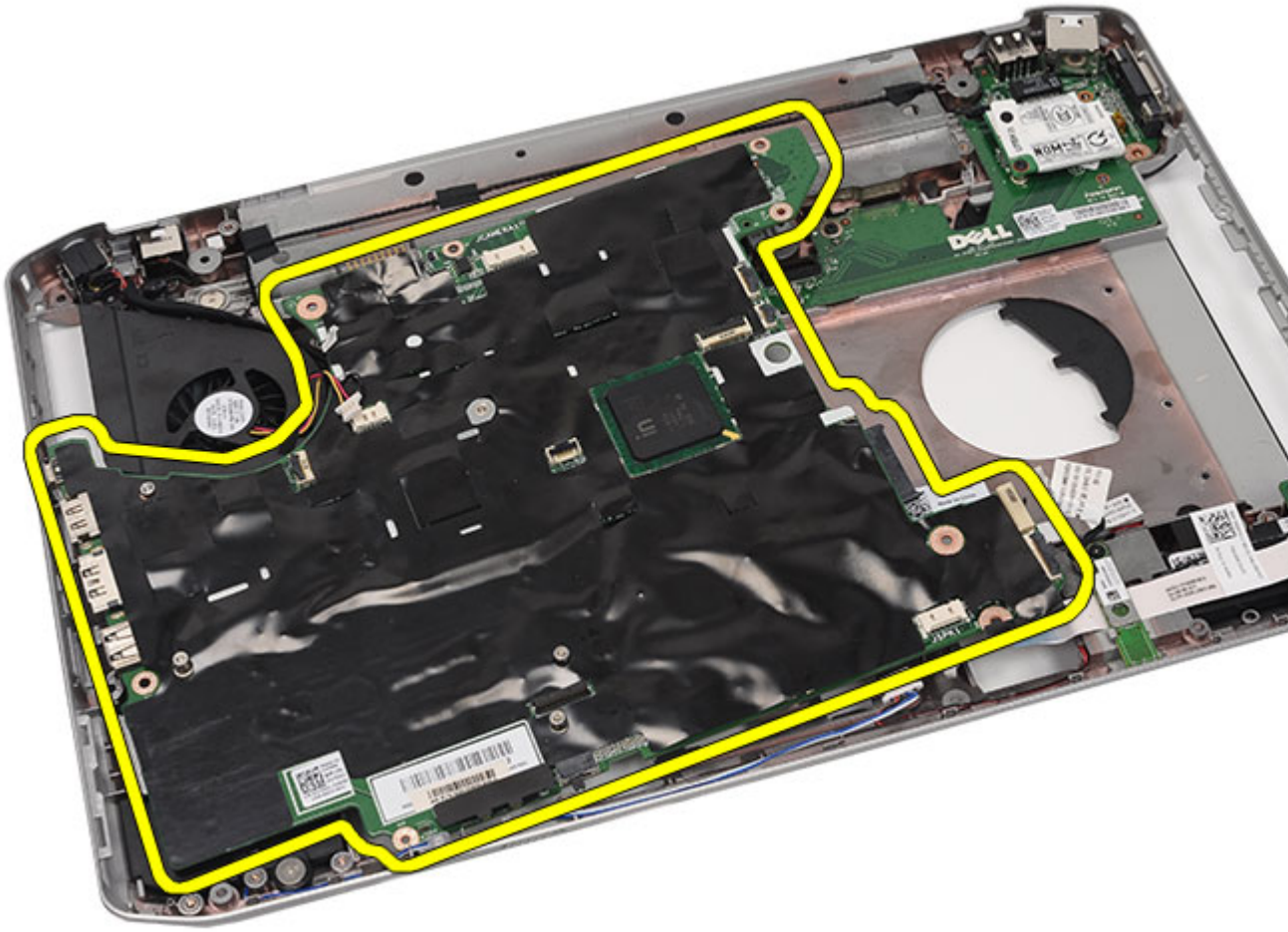


24. Lift the edge of the system board to disconnect it from the input/output (I/O) panel.



25. Release the system board from the port connectors.

26. Remove the system board.



Related Links

Installing the System Board

Installing the System Board

1. Align the system board to the port connectors and place the system board in the computer.
2. Engage the connector on the back of the system board to the input/output (I/O panel).
3. Tighten the screws to secure the system board.
4. Connect the following cables to the system board:
   - thermal fan cable
   - speaker cable
   - audio board cable
   - bluetooth cable
5. Replace the support brackets.
6. Replace the LED board.
7. Replace the display assembly.

8. Replace the ExpressCard/Smart Card/PCMCIA module.
9. Replace the palm rest.
10. Replace the processor.
11. Replace the heat sink.
12. Replace the CPU door..
13. Replace the wireless wide area network (WWAN).
14. Replace the wireless local area network (WLAN).
15. Replace the hard drive.
16. Replace the optical drive.
17. Replace the keyboard.
18. Replace the keyboard trim
19. Replace the memory.
20. Replace the back panel.
21. Replace the secure digital (SD) card.
22. Replace the subscriber identity module (SIM) card.
23. Replace the battery.
24. Follow the procedures in After Working Inside Your Computer.

Related Links

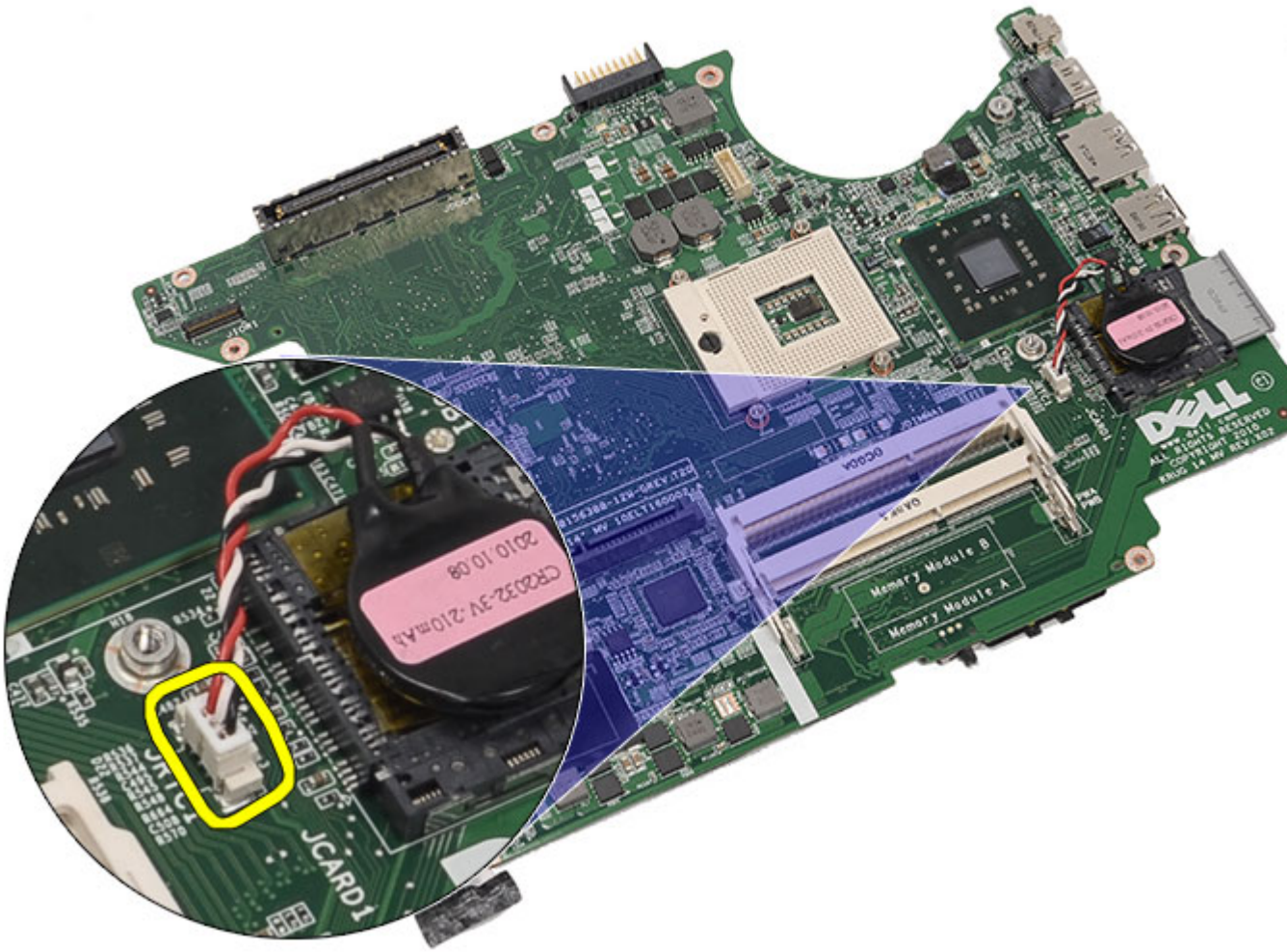
Removing the System Board

27

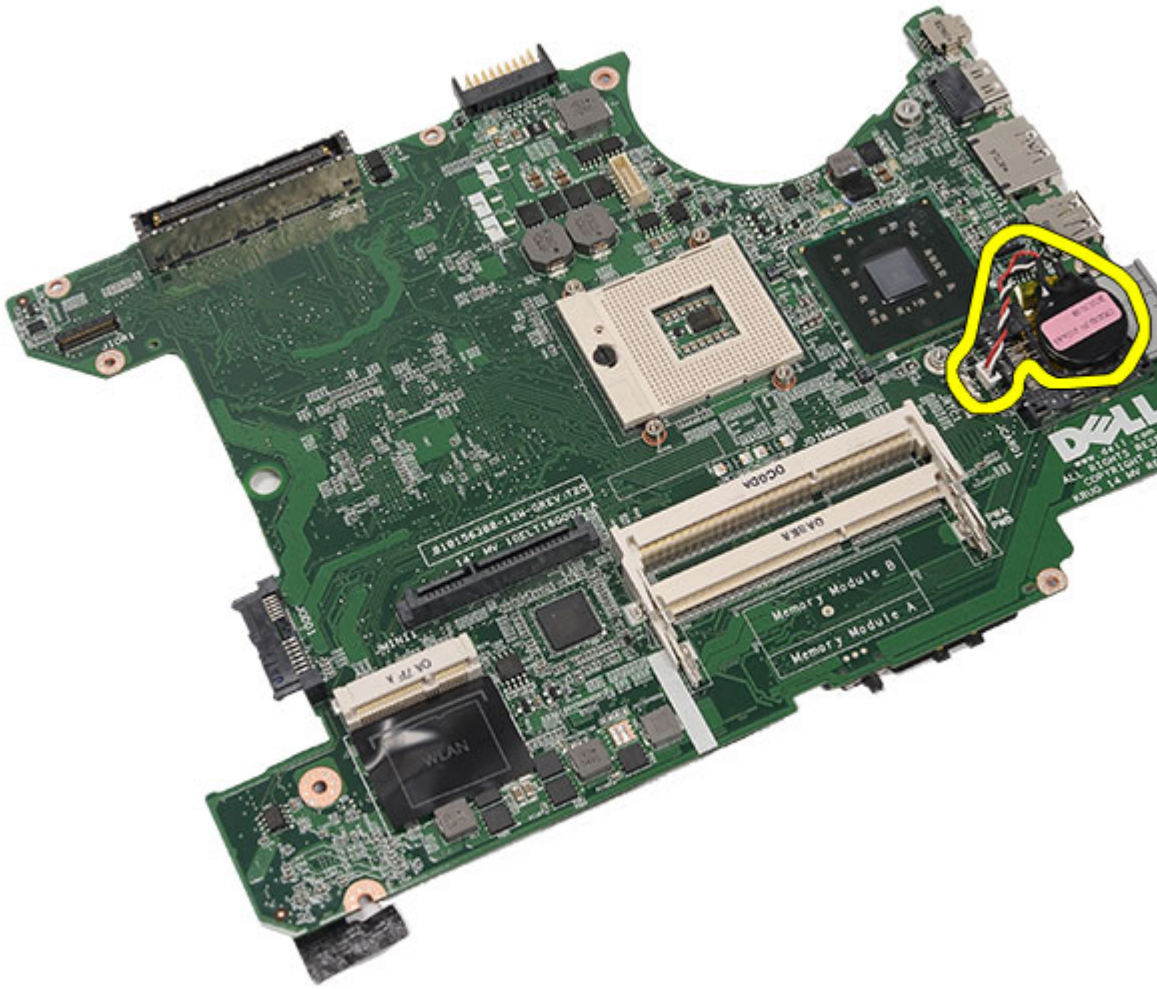
Coin-Cell baterija

Removing the Coin-Cell Battery

1. Follow the procedures in Before Working On Your Computer.
2. Remove the battery.
3. Remove the subscriber identity module (SIM) card.
4. Remove the secure digital (SD) card.
5. Remove the back panel.
6. Remove the memory.
7. Remove the keyboard trim.
8. Remove the keyboard.
9. Remove the optical drive.
10. Remove the hard drive.
11. Remove the wireless wide area network (WWAN).
12. Remove the wireless local area network (WLAN).
13. Remove the CPU door.
14. Remove the heat sink.
15. Remove the processor.
16. Remove the palm rest.
17. Remove the ExpressCard/Smart Card/PCMCIA module,
18. Remove the display assembly.
19. Remove the LED board.
20. Remove the support brackets.
21. Remove the system board.
22. Disconnect the coin-cell battery connector.



23. Pry and remove the coin-cell battery.



Related Links

Installing the Coin-Cell Battery

Installing the Coin-Cell Battery

1. Connect the coin-cell battery to system board and secure it.
2. Replace the system board.
3. Replace the support brackets.
4. Replace the LED board.
5. Replace the display assembly.
6. Replace the ExpressCard/Smart Card/PCMCIA module.
7. Replace the palm rest.
8. Replace the processor.
9. Replace the heat sink.
10. Replace the CPU door.
11. Replace the wireless local area network (WLAN).

12. Replace the wireless wide area network (WWAN).
13. Replace the hard drive.
14. Replace the optical drive.
15. Replace the keyboard.
16. Replace the keyboard trim.
17. Replace the memory.
18. Replace the back panel.
19. Replace the secure digital (SD) card.
20. Replace the subscriber identity module (SIM) card.
21. Replace the battery.
22. Follow the procedures in After Working Inside Your Computer.

Related Links

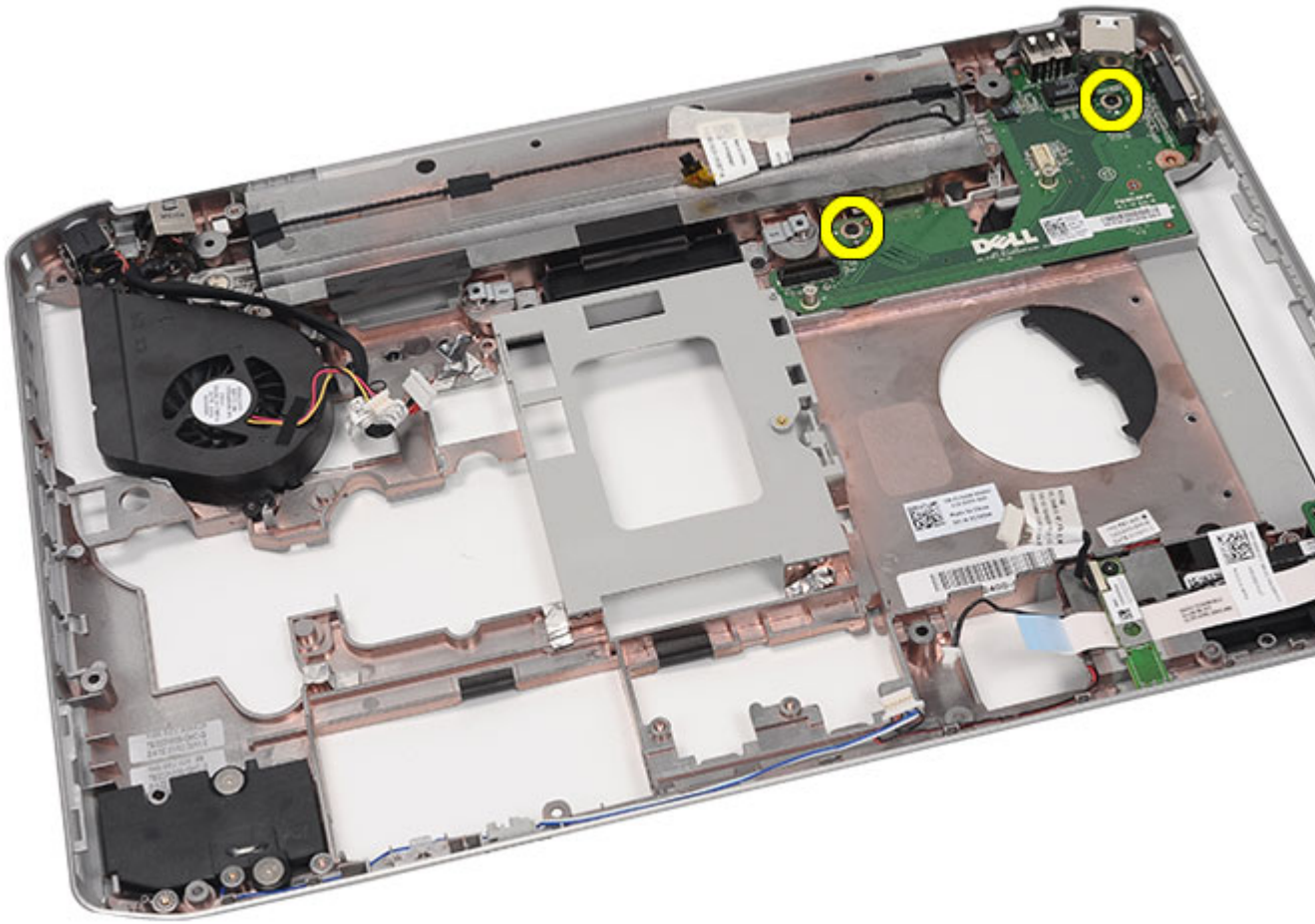
Removing the Coin-Cell Battery

28

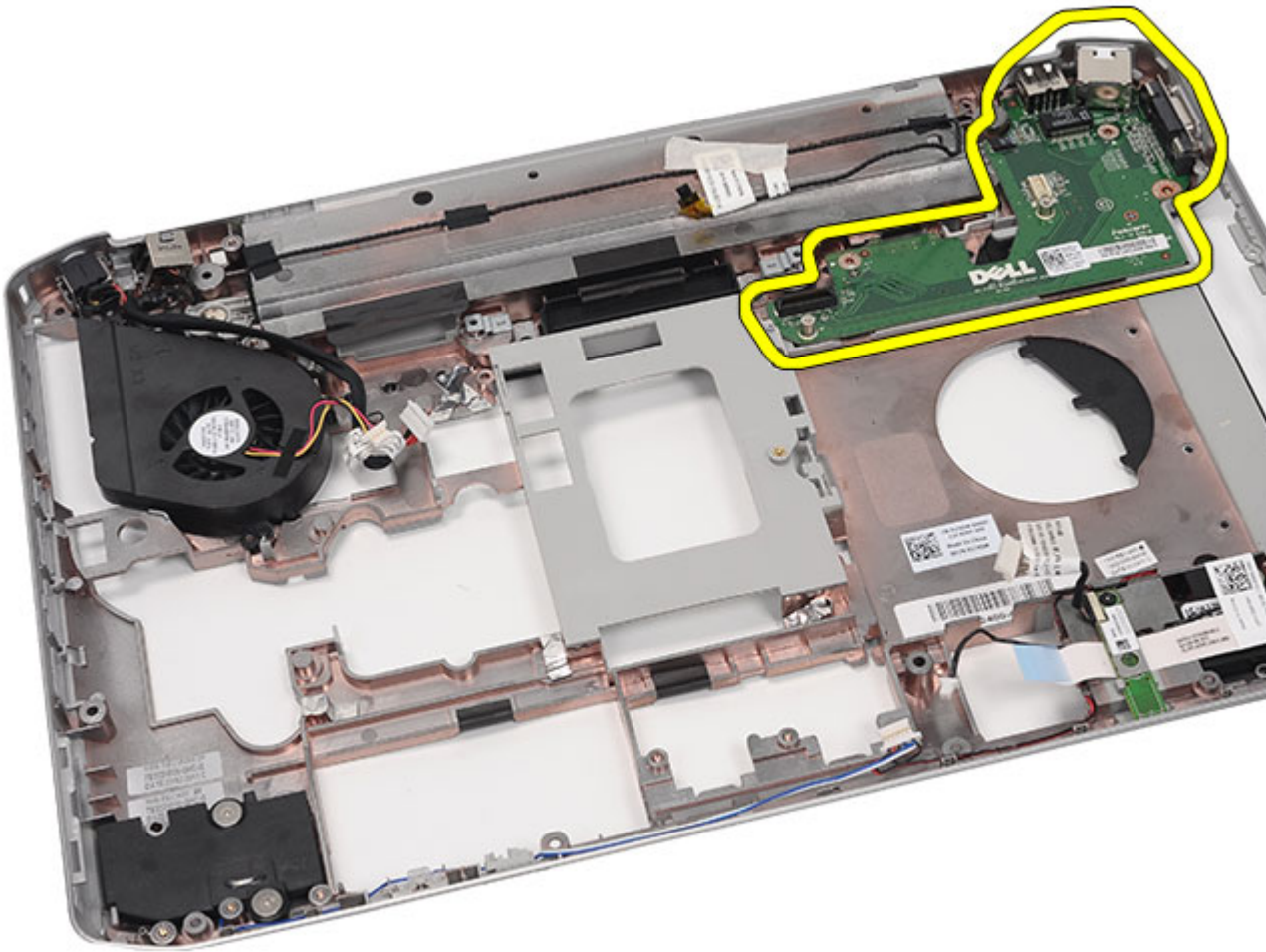
Ulazno/izlazna ploča

Removing The Input/Output (I/O) Panel

1. Follow the procedures in Before Working On Your Computer.
2. Remove the battery.
3. Remove the subscriber identity module (SIM) card.
4. Remove the secure digital (SD) card.
5. Remove the back panel.
6. Remove the memory
7. Remove the keyboard trim.
8. Remove the keyboard.
9. Remove the optical drive.
10. Remove the hard drive.
11. Remove the wireless local area network (WLAN).
12. Remove the wireless wide area network (WWAN).
13. Remove the CPU door.
14. Remove the heat sink.
15. Remove the processor.
16. Remove the palm rest.
17. Remove the ExpressCard/Smart Card/PCMCIA module.
18. Remove the display assembly.
19. Remove the LED board.
20. Remove the support brackets.
21. Remove the system board.
22. Remove the screws that secure the I/O panel.



23. Remove the I/O panel.



Related Links

Installing The Input/Output (I/O) Panel

Installing the Input/Output (I/O) Panel

1. Place the I/O panel in the computer.
2. Tighten the screws to secure the I/O panel.
3. Replace the system board.
4. Replace the support brackets.
5. Replace the LED board.
6. Replace the display assembly.
7. Replace the ExpressCard/Smart Card/PCMCIA module
8. Replace the palm rest.
9. Replace the processor.
10. Replace the heat sink.
11. Replace the CPU door.

12. Replace the wireless local area network (WLAN).
13. Replace the wireless wide area network (WWAN).
14. Replace the hard drive.
15. Replace the optical drive.
16. Replace the keyboard.
17. Replace the keyboard trim.
18. Replace the memory.
19. Replace the back panel.
20. Replace the secure digital (SD) card.
21. Replace the subscriber identity module (SIM) card.
22. Replace the battery.
23. Follow the procedures in After Working Inside Your Computer.

Related Links

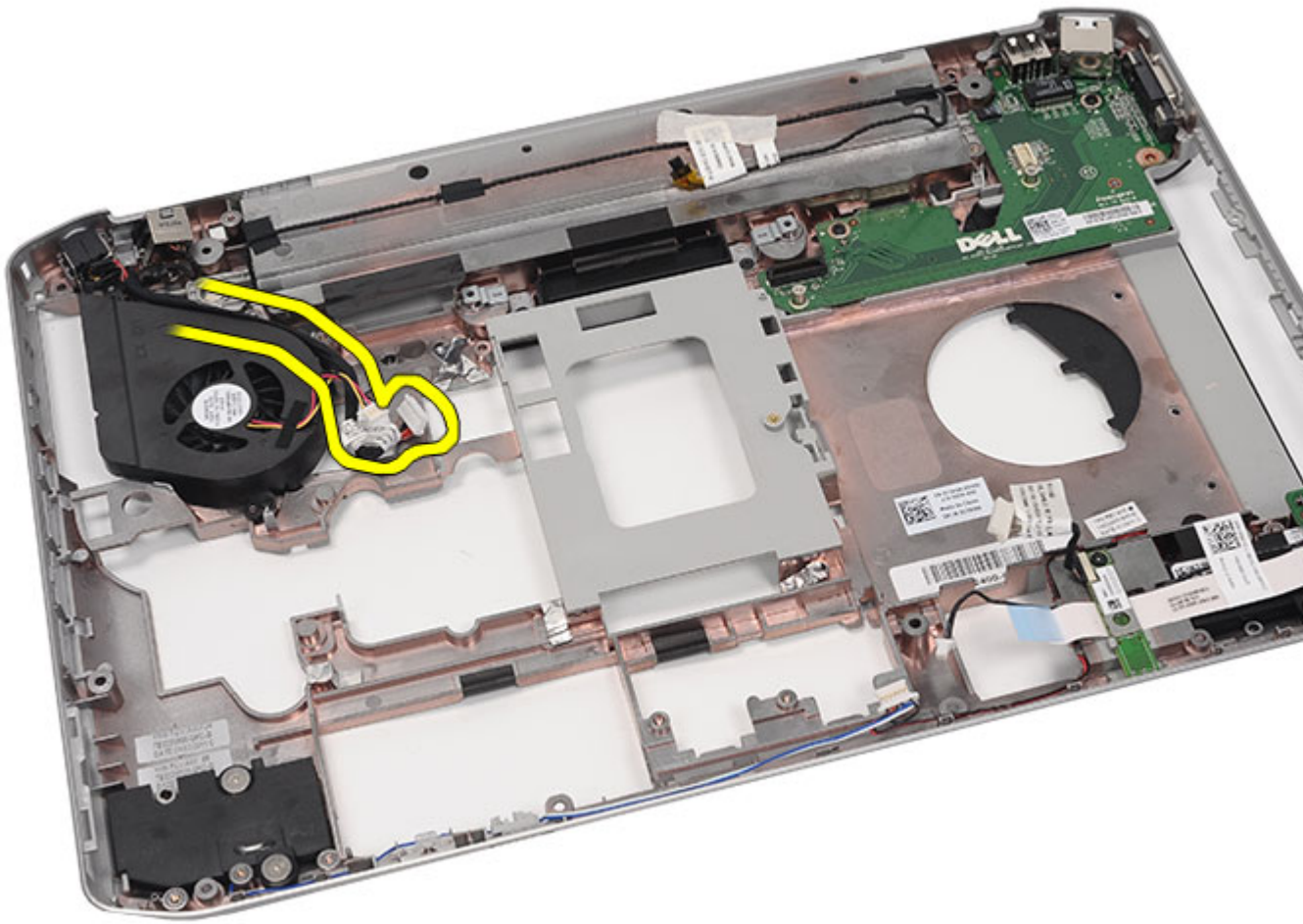
Removing the Input/Output (I/O) Panel

29

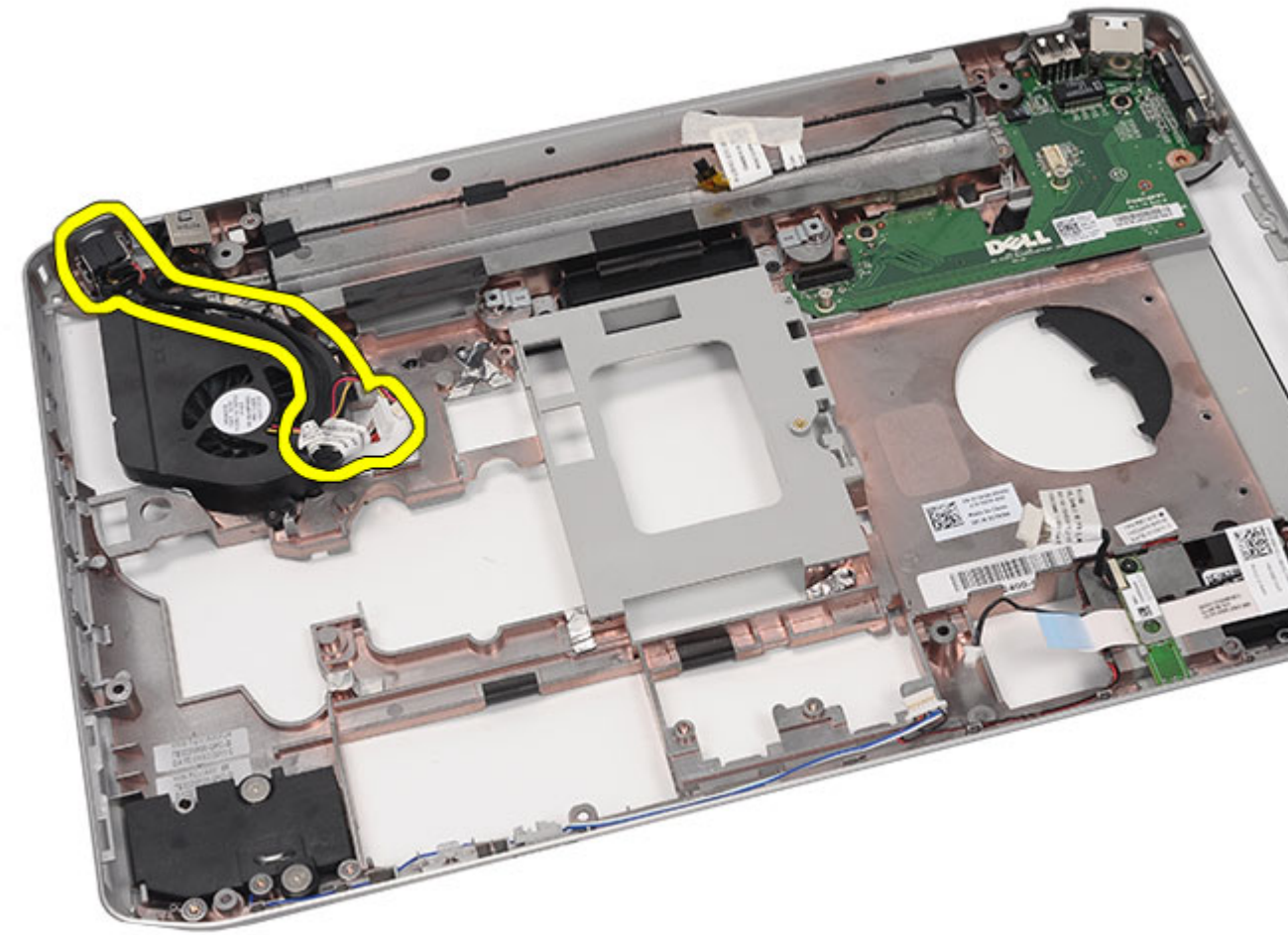
Konektor za napajanje

Removing the Power Connector

1. Follow the procedures in Before Working On Your Computer.
2. Remove the battery.
3. Remove the subscriber identity module (SIM) card.
4. Remove the secure digital (SD) card.
5. Remove the back panel.
6. Remove the memory.
7. Remove the keyboard trim.
8. Remove the keyboard.
9. Remove the optical drive.
10. Remove the hard drive.
11. Remove the wireless local area network (WLAN).
12. Remove the wireless wide area network (WWAN).
13. Remove the CPU door.
14. Remove the heat sink.
15. Remove the processor.
16. Remove the palm rest.
17. Remove the ExpressCard/Smart Card/PCMCIA module
18. Remove the display assembly
19. Remove the LED board.
20. Remove the support brackets.
21. Remove the system board.
22. Remove the power connector from the routing channel.



23. Remove the power connector.



Related Links

Installing the Power Connector

Installing the Power Connector

1. Secure the DC-In port to the routing channel on the processor fan.
2. Replace the system board.
3. Replace the support brackets.
4. Replace the LED board.
5. Replace the display assembly.
6. Replace the ExpressCard/Smart Card/PCMCIA module.
7. Replace the palm rest.
8. Replace the processor.
9. Replace the heat sink.
10. Replace the CPU door.
11. Replace the wireless wide area network (WWAN).

12. Replace the wireless local area network (WLAN).
13. Replace the hard drive.
14. Replace the optical drive.
15. Replace the keyboard.
16. Replace the keyboard trim.
17. Replace the memory.
18. Replace the back panel.
19. Replace the secure digital (SD) card.
20. Replace the subscriber identity module (SIM) card.
21. Replace the battery.
22. Follow the procedures in After Working Inside Your Computer.

Related Links

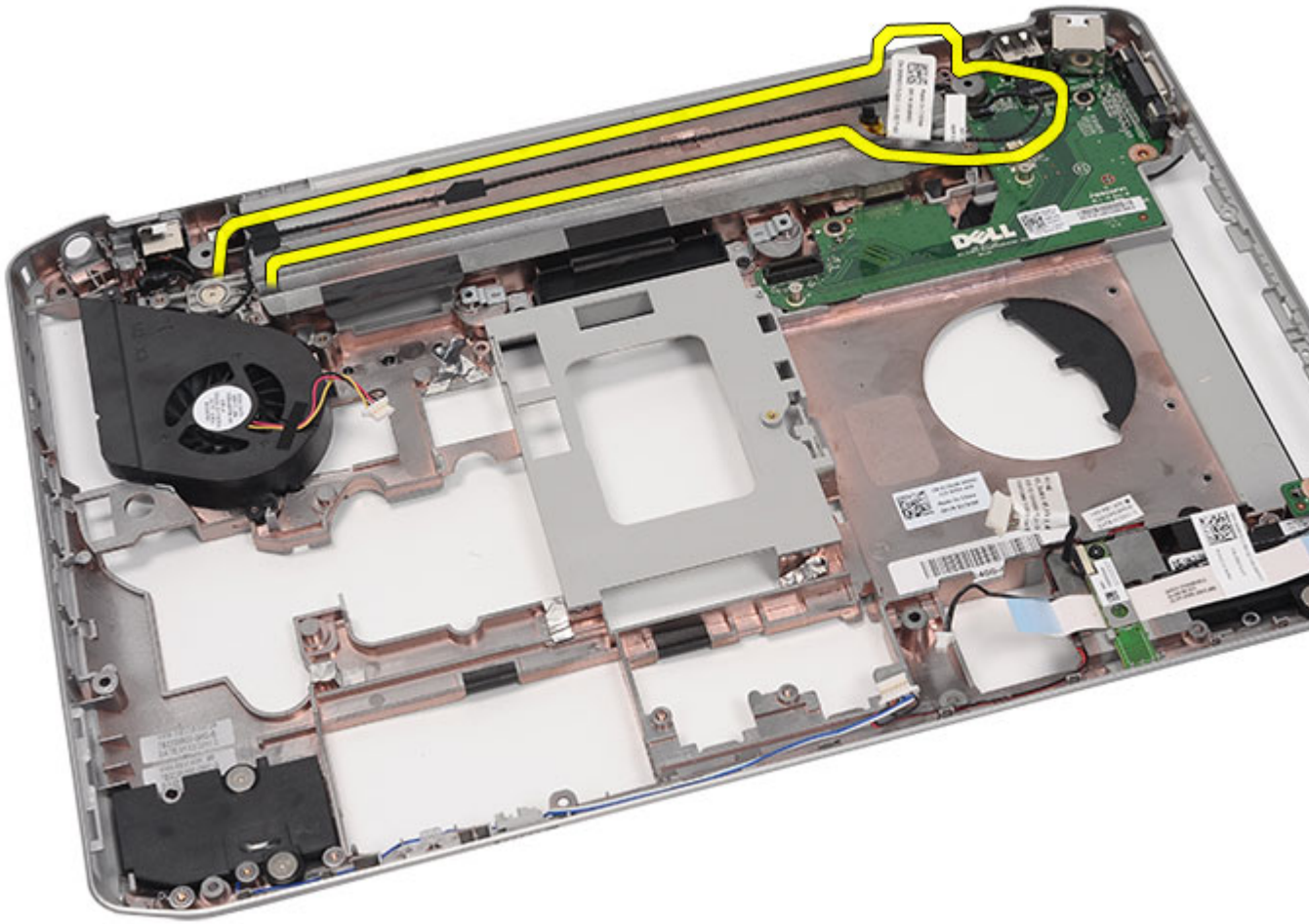
Removing the Power Connector

30

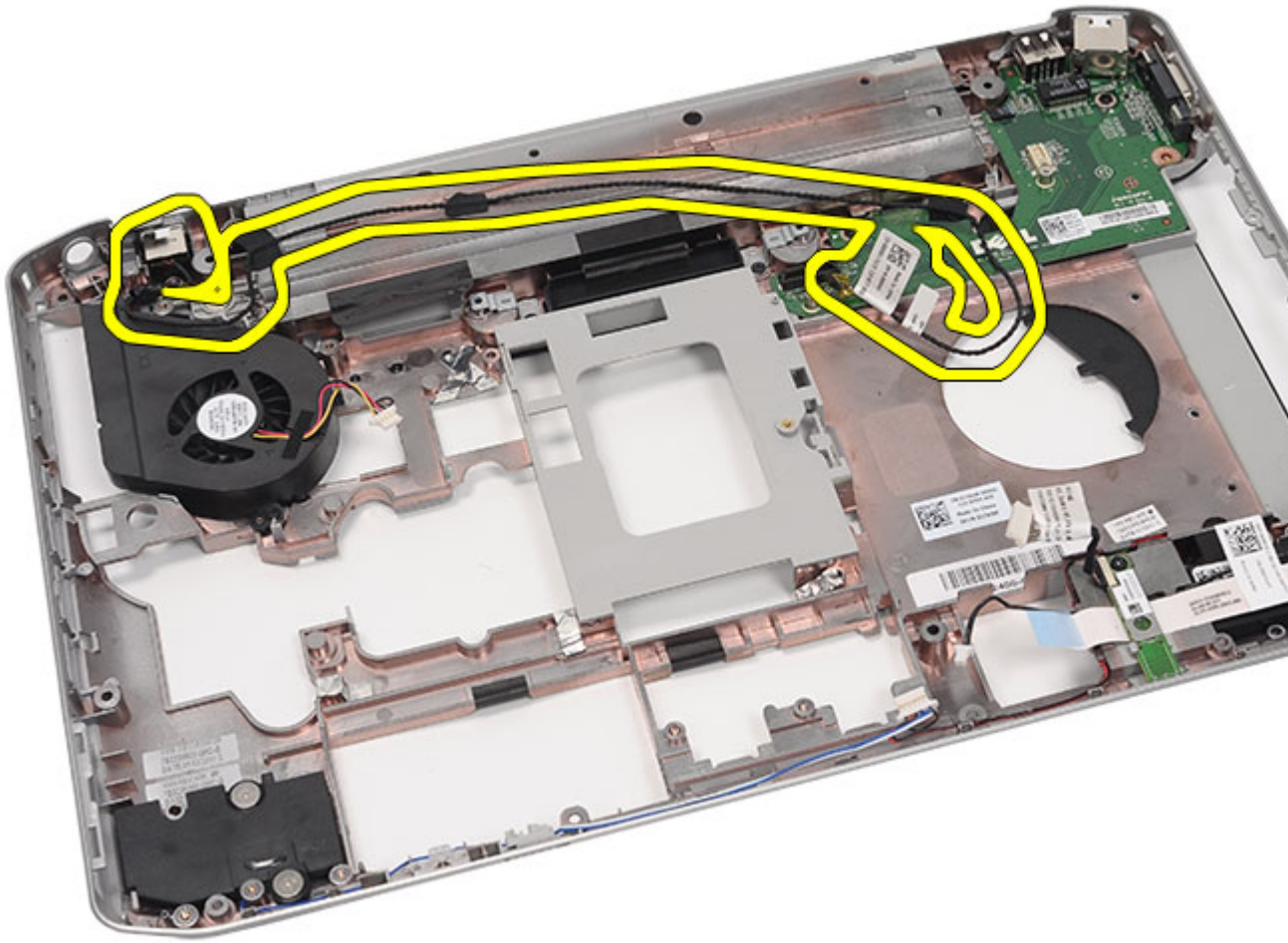
Konektor modema

Removing the Modem Connector

1. Follow the procedures in Before Working On Your Computer.
2. Remove the battery.
3. Remove the subscriber identity module (SIM) card.
4. Remove the secure digital (SD) card.
5. Remove the back panel.
6. Remove the memory.
7. Remove the keyboard trim.
8. Remove the keyboard.
9. Remove the optical drive.
10. Remove the hard drive.
11. Remove the wireless local area network (WLAN).
12. Remove the wireless wide area network (WWAN).
13. Remove the CPU door.
14. Remove the heat sink.
15. Remove the processor.
16. Remove the palm rest.
17. Remove the ExpressCard/Smart Card/PCMCIA module
18. Remove the display assembly.
19. Remove the LED board.
20. Remove the modem card.
21. Remove the support brackets.
22. Remove the system board.
23. Remove the power connector.
24. Remove the modem cable from the routing channel.



25. Remove the modem connector.



Related Links

Installing the Modem Connector

Installing the Modem Connector

1. Secure the modem connector into the routing channel on the thermal fan.
2. Replace the system board.
3. Replace the support brackets.
4. Replace the audio board.
5. Replace the bluetooth.
6. Replace the audio board.
7. Replace the display assembly.
8. Replace the ExpressCard/Smart Card/PCMCIA module.
9. Replace the palm rest.
10. Replace the processor.
11. Replace the heat sink.

12. Replace the CPU door.
13. Replace the wireless local area network (WLAN)
14. Replace the wireless wide area network (WWAN)
15. Replace the hard drive.
16. Replace the optical drive.
17. Replace the keyboard.
18. Replace the keyboard trim.
19. Replace the memory.
20. Replace the back panel.
21. Replace the secure digital (SD) card.
22. Replace the subscriber identity module (SIM) card.
23. Replace the battery.
24. Follow the procedures in After Working Inside Your Computer.

Related Links

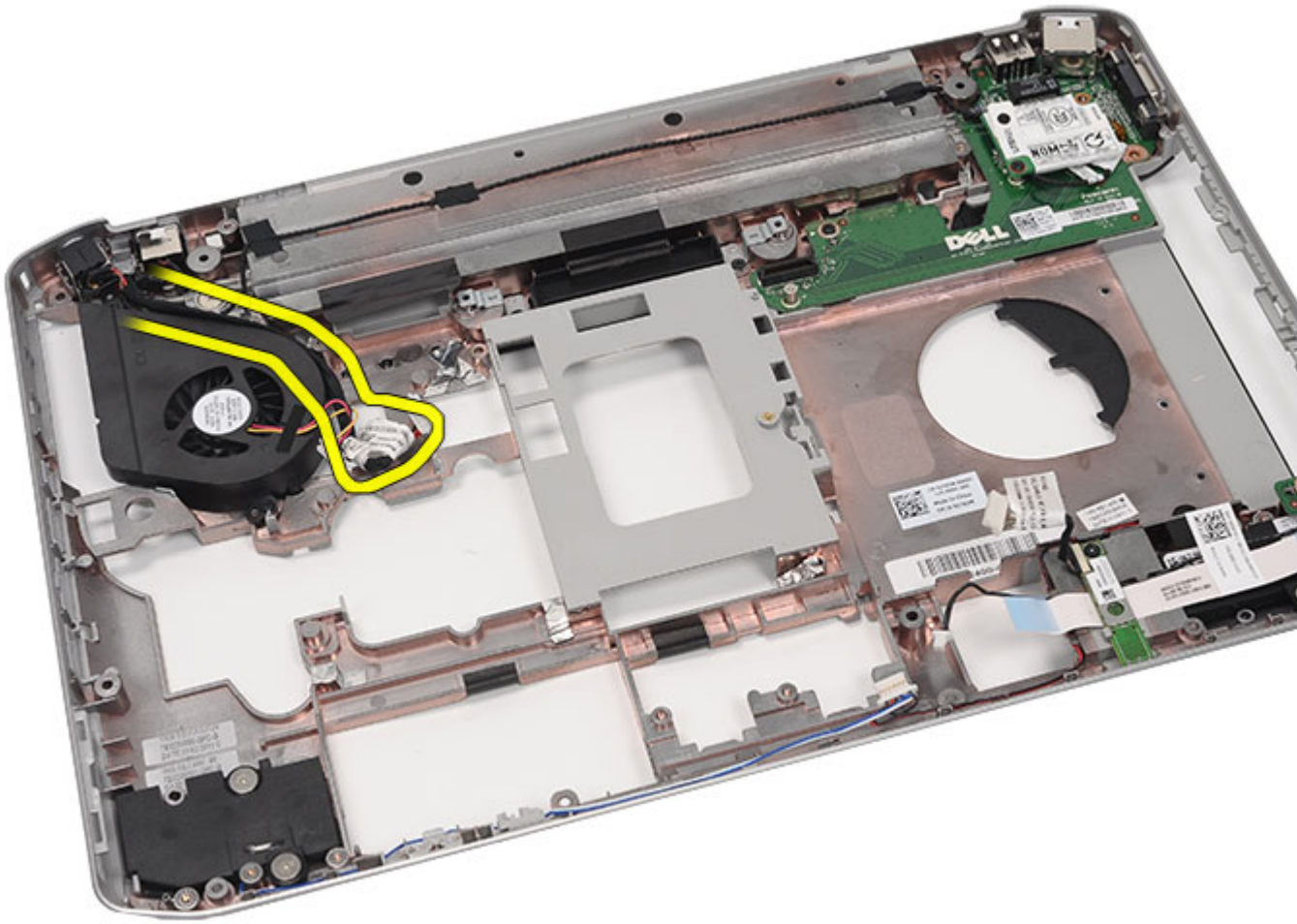
Removing the Modem Connector

31

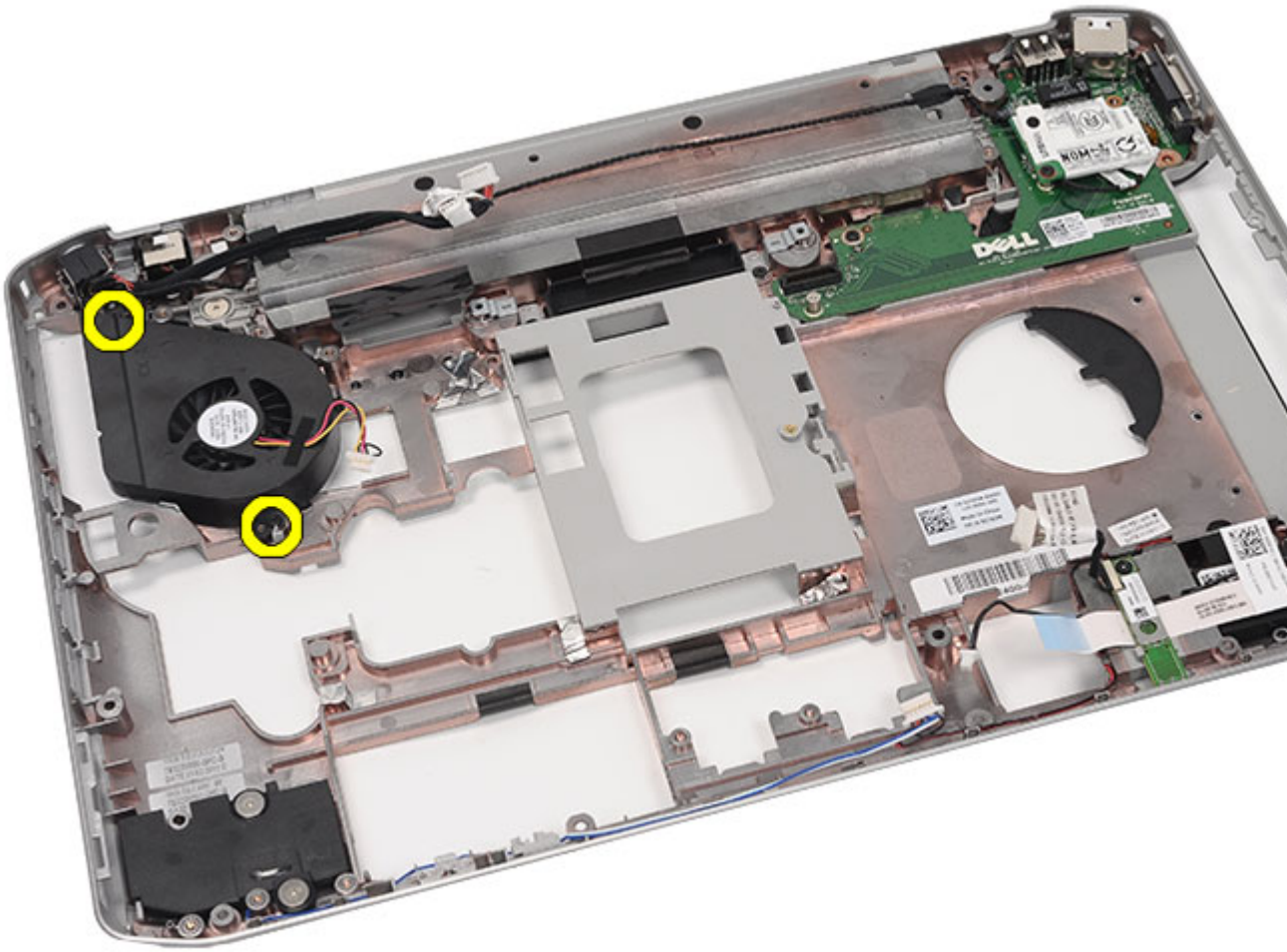
Thermal Fan

Removing the Thermal Fan

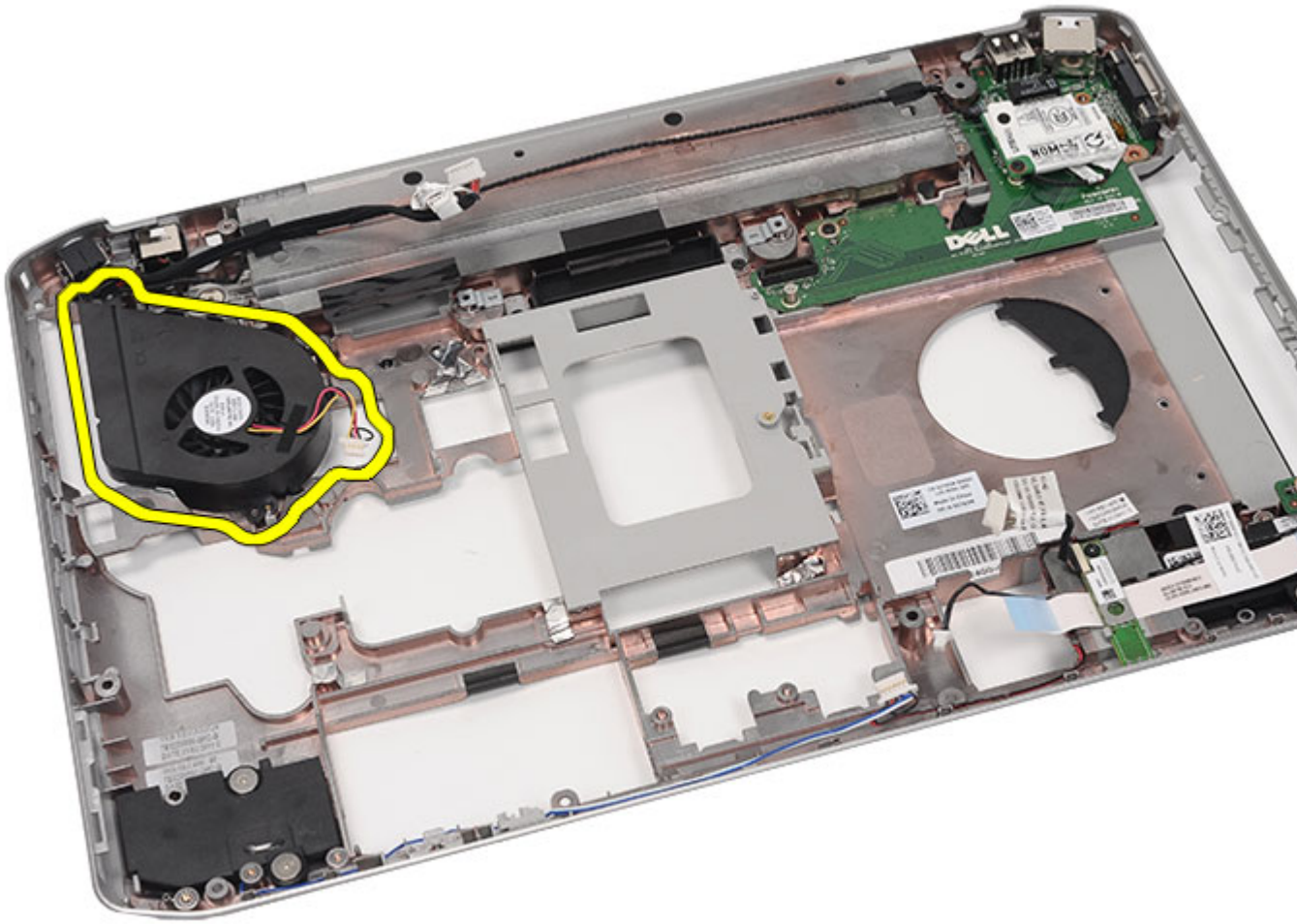
1. Follow the procedures in Before Working On Your Computer.
2. Remove the battery.
3. Remove the subscriber identity module (SIM) card.
4. Remove the secure digital (SD) card.
5. Remove the back panel.
6. Remove the memory.
7. Remove the keyboard trim.
8. Remove the keyboard.
9. Remove the optical drive.
10. Remove the hard drive.
11. Remove the wireless local area network (WLAN).
12. Remove the wireless wide area network (WWAN).
13. Remove the CPU door.
14. Remove the heat sink.
15. Remove the processor.
16. Remove the palm rest.
17. Remove the ExpressCard/Smart Card/PCMCIA module.
18. Remove the display assembly.
19. Remove the LED board.
20. Remove the support brackets.
21. Remove the system board.
22. Disengage the power connector and the modem connector cables from the routing channel.



23. Remove the screw that secures the thermal fan.



24. Remove the thermal fan.



Related Links

Installing the Thermal Fan

Installing the Thermal Fan

1. Connect the processor fan in the computer.
2. Tighten the screws to secure the processor fan.
3. Secure the power connector and the modem connector cables to the routing channels.
4. Replace the system board.
5. Replace the brackets.
6. Replace the LED board.
7. Replace the display assembly.
8. Replace the ExpressCard/Smart Card/PCMCIA module.
9. Replace the palm rest.
10. Replace the processor.
11. Replace the heat sink.

12. Replace the CPU door.
13. Replace the wireless local area network (WLAN).
14. Replace the wireless wide area network (WWAN).
15. Replace the hard drive.
16. Replace the optical drive.
17. Replace the keyboard.
18. Replace the keyboard trim.
19. Replace the memory.
20. Replace the back panel.
21. Replace the secure digital (SD) card.
22. Replace the subscriber identity module (SIM) card.
23. Replace the battery.
24. Follow the procedures in After Working Inside Your Computer.

Related Links

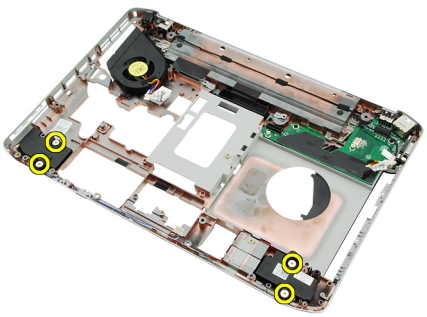
Removing the Thermal Fan

32

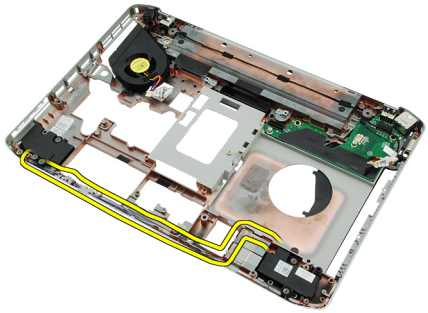
Zvučnik

Removing the Speakers

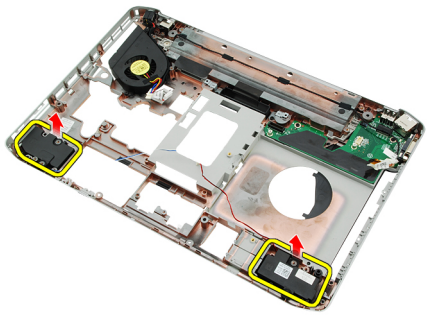
1. Follow the procedures in Before Working On Your Computer.
2. Remove the battery.
3. Remove the subscriber identity module (SIM) card.
4. Remove the secure digital (SD) card.
5. Remove the back panel.
6. Remove the memory.
7. Remove the keyboard trim.
8. Remove the keyboard.
9. Remove the optical drive.
10. Remove the hard drive.
11. Remove the wireless local area network (WLAN).
12. Remove the wireless wide area network (WWAN).
13. Remove the CPU door.
14. Remove the heat sink.
15. Remove the processor.
16. Remove the palm rest.
17. Remove the ExpressCard/Smart Card/PCMCIA module.
18. Remove the display assembly.
19. Remove the LED board.
20. Remove the support brackets.
21. Remove the system board.
22. Remove the bluetooth card.
23. Remove the audio board.
24. Remove the screws that secure the speakers.



25. Remove the speaker cables from the routing channels.



26. Remove the speakers.



Related Links

Installing the Speakers

Installing the Speakers

1. Secure the speaker cables to the routing channels.
2. Connect the speakers.
3. Tighten the screws to secure the speakers.
4. Replace the audio board.
5. Replace the Bluetooth.
6. Replace the system board.
7. Replace the support brackets.
8. Replace the LED board..
9. Replace the display assembly.
10. Replace the ExpressCard/Smart Card/PCMCIA module.
11. Replace the palm rest.
12. Replace the processor.
13. Replace the heat sink.
14. Replace the CPU door.
15. Replace the wireless local area network (WLAN).
16. Replace the wireless wide area network (WWAN).
17. Replace the hard drive.
18. Replace the optical drive.
19. Replace the keyboard.
20. Replace the keyboard trim.

21. Replace the keyboard trim and keyboard.
22. Replace the memory.
23. Replace the back panel.
24. Replace the secure digital (SD) card.
25. Replace the subscriber identity module (SIM) card.
26. Replace the battery.
27. Follow the procedures in After Working Inside Your Computer.

Related Links

Removing the Speakers

33

Okno ekrana

Removing the Display Bezel

1. Follow the procedures in Before Working On Your Computer.
2. Remove the battery.
3. Pry up the bottom edge of the display bezel.

4. Work your way around the sides and the top edge of the display bezel.

5. Remove the display bezel.

Related Links

Installing the Display Bezel

1. Place the display bezel on the computer.
2. From the top edge, press downward on the display bezel to engage the tabs om all the edges.
3. Work your way around the side and the bottom edge.
4. Replace the battery.
5. Follow the procedures in After Working Inside Your Computer.

Related Links

Removing the Display Bezel

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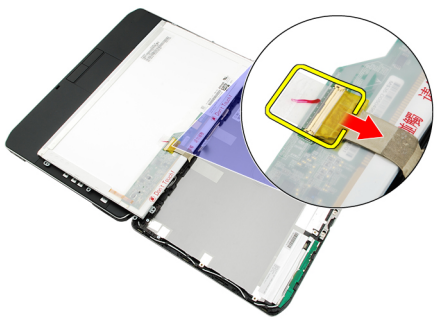
Ploča ekrana

Removing the Display Panel

1. Follow the procedures in Before Working On Your Computer.
2. Remove the battery.
3. Remove the display bezel.
4. Remove the screws that secure the display panel.

5. Disconnect the low-voltage differential signaling (LVDS) cable from the back of the display panel.



6. Remove the display panel from the display assembly.

7. Remove the screws that secure the display brackets to the display panel and remove the brackets.

Related Links

Installing the Display Panel

Installing the Display Panel

1. Align the display brackets with the display panel.
2. Tighten the screws to secure the display panel.
3. Connect the low-voltage differential signaling (LVDS) cable to the back of the display panel.
4. Place the display panel in the display cover.
5. Tighten the screws to secure the display panel.
6. Replace the display bezel.
7. Replace the battery.
8. Follow the procedures in After Working Inside Your Computer.

Related Links

Removing the Display Panel

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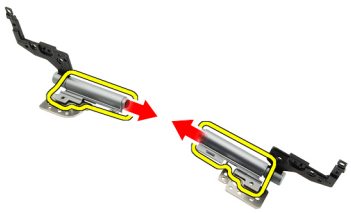
Zglobovi ekrana

Removing the Display Hinges

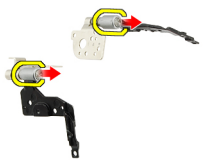
1. Follow the procedures in Before Working On Your Computer.
2. Remove the battery.
3. Remove the back panel.
4. Remove the keyboard trim.
5. Remove the keyboard.
6. Remove the optical drive.
7. Remove the CPU door.
8. Remove the palm rest.
9. Remove the display assembly.
10. Remove the display bezel..
11. Remove the display panel.
12. Remove the screws that secure the display hinges.

13. Remove the display hinges from the display assembly.

14. Separate the display hinge towers from the hinges.



15. Remove the hinge caps from the display hinges.



Related Links

Installing the Display Hinges

Installing the Display Hinges

1. Secure the display hinge caps onto the ends of the hinges.
2. Insert the display hinges into the hinge towers.
3. Insert the low-voltage differential signaling (LVDS) cable into the left hinge tower.
4. Replace the left hinge on the display cover.
5. Replace the antenna cables into the right hinge tower.
6. Replace the right hinge on the display cover.
7. Tighten the screw to secure the display hinges.
8. Replace the display panel.
9. Replace the display bezel.
10. Replace the display assembly.
11. Replace the palm rest.
12. Replace the CPU door.
13. Replace the optical drive.
14. Replace the keyboard.
15. Replace the keyboard trim.
16. Replace the back panel..
17. Replace the battery.
18. Follow the procedures in After Working Inside Your Computer.

Related Links

Removing the Display Hinges

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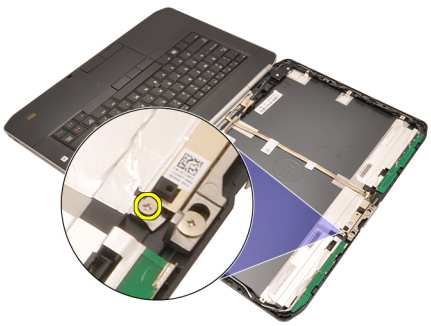
Kamera

Removing the Camera Module

1. Follow the procedures in Before Working On Your Computer.
2. Remove the battery.
3. Remove the display bezel.
4. Remove the display panel.
5. Disconnect the camera cable.

6. Loosen the screw that secures the camera module.



7. Lift and remove the camera module.

Related Links

Installing the Camera Module

Installing the Camera Module

1. Place the camera module on the display cover.
2. Tighten the screw to secure the camera.
3. Connect the camera cable to the camera module.
4. Replace the display panel
5. Replace the display bezel.
6. Replace the battery.
7. Follow the procedures in After Working Inside Your Computer.

Related Links

Removing the Camera Module

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Specifikacije

Technical Specifications

NOTE: Ponuda se može razlikovati po regionima. Sledeće specifikacije su samo one koje se po zakonu moraju isporučivati sa računarom. Za dodatne informacije u vezi sa konfiguracijom računara, kliknite na **Start → Pomoć i podrška** i izaberite opciju za prikaz informacija o računaru.

System Information	
Chipset	
Latitude 5420/E5420/ 5520/E5520	Intel HM65 Express chipset
Latitude E5420m/E5520m	Intel GM45 Express chipset
DRAM bus width	64-bit
Flash EPROM	SPI 32 Mbits
PCIe Gen1 bus	100 MHz

Processor	
Types	
Latitude 5420/E5420/ 5520/E5520	Intel Core i3/i5/i7 series
Latitude E5420m/E5520m	Intel Core 2 series
	Intel Celeron (Socket P) series

Memory	
Memory connector	two SODIMM slots
Memory capacity	1 GB, 2 GB, 4 GB, or 8 GB
Memory type	
Latitude 5420/E5420/5520/E5520	DDR3 SDRAM, 1333 MHz
Latitude E5420m/E5520m	DDR3 SDRAM, 1066 MHz
Minimum memory	1 GB
Maximum memory	8 GB
	NOTE: Only 64-bit operating systems support more than 4 GB memory.

Audio	
Type	two-channel high definition audio
Controller	92HD90B
Stereo Conversion	24-bit (analog-to-digital and digital-to-analog)
Interface:	
Internal	high definition audio
External	microphone-in connector, stereo headphones/external speakers connector
Speakers	1.5 W stereo
Internal speaker amplifier	1.5 W mono
Volume controls	media buttons for Media control

Video	
Type	Intel UMA video
Data bus	integrated video
Video controller	
Latitude 5420/E5420/5520/E5520	Intel HD Graphics
	Intel HD Graphics 3000
Latitude E5420m/E5520m	Intel GM45
Output	15-pin video connector
	19-pin HDMI connector

Communications	
Network adapter	10/100/1000 Mbps Ethernet LAN
Wireless	internal wireless local area network (WLAN), wireless wide area network (WWAN), and Bluetooth wireless support

Ports and Connectors	
Audio	microphone connector, stereo headphone/speakers connector
Video	15-pin VGA connector
Network adapter	RJ-45 connector
USB	three 4-pin USB 2.0-compliant connectors, one eSATA/USB 2.0-compliant connector
Memory card reader	5-in-1 memory card reader

Display	
Type	White Light Emitting Diode (WLED) display
Size	
Latitude 5420/E5420/E5420m	14.0 inch high definition WLED
Latitude 5520/E55420/E5520m	15.6 inch high definition WLED
Active area (X/Y)	
Latitude 5420/E5420/E5420m	309.60 mm/173.90 mm
Latitude 5520/E55420/E5520m	344.20 mm/193.50 mm
Dimensions:	
Height	
Latitude 5420/E5420/E5420m	192.50 mm (7.57 inches)
Latitude 5520/E55420/E5520m	210.00 mm (8.27 inches)
Width	
Latitude 5420/E5420/E5420m	324.00 mm (12.75 inches)
Latitude 5520/E55420/E5520m	360.00 mm (14.17 inches)
Z-Height	
Latitude 5420/E5420/E5420m	5.20 mm (0.20 inch)
Latitude 5520/E55420/E5520m	5.80 mm (0.23 inch)
Diagonal	
Latitude 5420/E5420/E5420m	344.6 mm (14.00 inches)
Latitude 5520/E55420/E5520m	396.24 mm (15.60 inches)
Maximum resolution	
Latitude 5420/E5420/E5420m	
HD	1366 x 768 at 262 K colors
HD+	1600 x 900 at 262 K colors
Latitude 5520/E55420/E5520m	
HD	1366 x 768 at 263 K colors
FHD	1920 x 1080 at 262 K colors
Typical Brightness	200 nits
Operating angle	0° (closed) to 135°
Refresh rate	60 Hz
Minimum Viewing angles:	
Horizontal	+40°/–40°
Vertical	+10°/–30°

Display	
Pixel pitch	
Latitude 5420/E5420/E5420m	
HD	0.2265 mm x 0.2265 mm
HD+	0.1935 mm x 0.1935 mm
Latitude 5520/E55420/E5520m	
HD	0.2520 mm x 0.2520 mm
FHD	0.1935 mm x 0.1935 mm

Keyboard	
Number of keys	United States: 86 keys, United Kingdom: 87 keys, Brazil: 87 keys, and Japan: 90 keys
Layout	QWERTY/AZERTY/Kanji

Touchpad	
Active Area	
X-axis	80.00 mm
Y-axis	40.70 mm

Battery	
Type	4-, 6- or 9-cell "smart" lithium ion
Dimensions:	
Height	
4-, 6-, and 9-cell	20.00 mm (0.79 inch)
Width	
4- and 6-cell	208.00 mm (8.18 inches)
9-cell	214.00 mm (8.43 inches)
Depth	
4- and 6-cell	48.08 mm (1.89 inches)
9-cell	71.79 mm (2.83 inches)
Weight	
4-cell	240.00 g (0.53 lb)
6-cell	344.73 g (0.76 lb)
9-cell	508.20 g (1.12 lb)
Voltage	

Battery		
4-cell	14.8 VDC	
6- and 9-cell	11.1 VDC	
Temperature range:		
Operating	0 °C to 50 °C (32 °F to 122 °F)	
Non-Operating	–40 °C to 85 °C (–40 °F to 185 °F)	
	NOTE: The battery pack is capable of safely withstanding the above storage temperatures with 100% charge.	
	NOTE: The battery pack is also capable of withstanding storage temperatures from –20 °C to +60 °C with no degradation in its performance.	
Coin-cell battery	3 V CR2032 lithium coin cell	

AC Adapter		
Input voltage	100 VAC to 240 VAC	
Input current (maximum)	1.5 A, 1.6 A, or 1.7 A	
Input frequency	50 Hz to 60 Hz	
Output power	65 W or 90 W	
Output current	65 W	90 W
	3.34 A (continuous)	4.62 A (continuous)
Rated output voltage	19.5 +/– 1.0 VDC	
Dimensions		
	65 W	90 W
Height	16.00 mm (0.63 inch)	16.00 mm (0.63 inch)
Width	66.00 mm (2.60 inches)	70.00 mm (2.76 inches)
Length	127.00 mm (5.00 inches)	147.00 mm (5.79 inches)
Temperature range:		
Operating	0 °C to 40 °C (32 °F to 104 °F)	
Non-Operating	–40 °C to 70 °C (–40 °F to 158 °F)	

Physical	
Height	
Latitude 5420/E5420/E5420m	29.90 mm to 32.50 mm (1.18 inches to 1.28 inches)
Latitude 5520/E5520/E5520m	30.20 mm to 33.20 mm (1.19 inches to 1.31 inches)
Width	

Physical	
Latitude 5420/E5420/E5420m	350.00 mm (13.78 inches)
Latitude 5520/E5520/E5520m	388.00 mm (15.28 inches)
Depth	
Latitude 5420/E5420/E5420m	240.00 mm (9.45 inches)
Latitude 5520/E5520/E5520m	251.00 mm (9.88 inches)
Weight	
Latitude 5420/E5420/E5420m	2.27 kg (5.00 lb)
Latitude 5520/E5520	2.54 kg (5.60 lb)
Latitude E5520m	2.63 kg (5.80 lb)

Environmental	
Temperature:	
Operating	0 °C to 35 °C (32 °F to 95 °F)
Storage	–40 °C to 65 °C (–40 °F to 149 °F)
Relative humidity (maximum):	
Operating	10 % to 90 % (noncondensing)
Storage	5 % to 95 % (noncondensing)
Altitude (maximum):	
Operating	–15.20 m to 3048 m (–50 ft to 10,000 ft)
Non-Operating	–15.20 m to 10,668 m (–50 ft to 35,000 ft)
Airborne contaminant level	G1 or lower as defined by ISA-S71.04–1985

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Podešavanje sistema

Pregled

Program za podešavanje sistema (System Setup) omogućava da:

- promenite informacije o konfiguraciji sistema nakon dodavanja, promene ili uklanjanja hardvera na vašem računaru
- podesite ili promenite korisničke opcije kao što je lozinka korisnika.
- pročitate trenutnu veličinu memorije ili podesite tip instaliranog čvrstog diska.

OPREZ: Ukoliko niste iskusan korisnik računara, ne menjajte postavke ovog programa. Neke promene mogu uzrokovati nepravilan rad računara.

Ulaz u Podešavanje sistema

1. Uključite (ili ponovo pokrenite) računar.
2. Kada se prikaže plavi DELL logotip, morate sačekati da se pojavi F2 odzivnik.
3. Kada se pojavi F2 odzivnik, odmah pritisnite taster <F2>.

   NAPOMENA: F2 odzivnik označava da je tastatura aktivna. Ovaj odzivnik se može pojaviti veoma brzo, tako da morate čekati da se prikaže, a zatim pritisnuti taster <F2>. Ako taster <F2> pritisnete pre nego što se to od vas zatraži, taj pritisak na taster se gubi.
4. Ako čekate predugo i pojavi se logotip operativnog sistema, nastavite da čekate dok ne vidite Microsoft Windows radnu površinu. Zatim isključite računar i pokušajte ponovo.

System Setup Options

NOTE: Depending on the computer and its installed devices, the items listed in this section may or may not appear.

General	
System Information	This section lists the primary hardware features of your computer. • System Information • Memory Information • Processor Information • Device Information
Battery Information	Displays the battery status and the type of AC adapter connected to the computer
Boot Sequence	Allows you to change the order in which the computer attempts to find an operating system. • Diskette Drive

General	
	• Internal HDD • USB Storage Device • CD/DVD/CD-RW Drive • Onboard NIC • Cardbus NIC
Boot List Option	Allows you to change the boot list option. • Legacy • UEFI
Date/Time	Allows you to change the date and time.
System Configuration	
Integrated NIC	Allows you to configure the integrated network controller. The options are: • Disabled • Enabled • Enabled w/PXE • Enabled w/ImageServer Default Setting: **Enabled w/PXE**
System Management	Allows you to control the systems management mechanism. The options are: • Disabled • Alert Only • ASF 2.0 • DASH/ASF 2.0 Default Setting: **Disabled**
Serial Port	Identifies and defines the serial port settings. You can set the serial port to: • Disabled • Auto • COM1 • COM2 • COM3 • COM4 **NOTE:** The operating system may allocate resources even though the setting is disabled.
Parallel Port	Allows you to configure the parallel port on the docking station. The options are: • Disabled • AT • PS2 • ECP • DMA1

	• DMA3 Default Setting: **AT**
Serial Port	Allows you to configure the integrated serial port. The options are: • Disabled • COM1 • COM2 • COM3 • COM4 Default Setting: **COM1**
SATA Operation	Allows you to configure the internal SATA hard-drive controller. The options are: • Disabled • ATA • AHCI Default Setting: **AHCI** **NOTE:** SATA is configured to support RAID mode.
USB Controller	Allows you to control the USB controller. The options are: • Enable USB Controller • Diasabe USB Mass Storage Dev • Disable USB Controller Default Setting: **Enable USB Controller**
SMART Reporting	Allows you to activate the Self Monitoring Analysis and Reporting Technology (SMART). Default Setting: **Disabled**
Diskette Drive	Allows you to activate the diskette drives. The options are: • Disabled • Enabled Default Setting: **Disabled**
Miscellaneous Devices	Allows you to enable or disable the following devices: • Internal Modem • Fixed Bay • eSATA Ports • Hard Drive Free Fall Protection • External USB Port • Microphone • Camera You can also enable or disable Media Card and 1394 together. Default Setting: All devices are enabled.

System Configuration	
Keyboard illumination	Allows you to configure the keyboard illumination feature. The options are: • Disabled • Level is 25% • Level is 50% • Level is 50% • Levels is 100% Default Setting: **Level is 75%**
Drives	Allows you to configure the SATA drives on board. The options are: • SATA-0 • SATA-1 • SATA-4 • SATA-5 Default Setting: All drives are enabled.

Video	
LCD Brightness	Allows you to set the display brightness depending up on the power source (On Battery and On AC).

NOTE: The Video setting will only be visible when a video card is installed into the system.

Security	
Admin Password	Allows you to set, change, or delete the administrator (admin) password. **NOTE:** You must set the admin password before you set the system or hard drive password. **NOTE:** Successful password changes take effect immediately. **NOTE:** Deleting the admin password automatically deletes the system password and the hard drive password. **NOTE:** Successful password changes take effect immediately. Default Setting: **Not set**
System Password	Allows you to set, change or delete the system password. **NOTE:** Successful password changes take effect immediately. Default Setting: **Not set**
Internal HDD-0 Password	Allows you to set or change the system's internal hard-disk drive. **NOTE:** Successful password changes take effect immediately. Default Setting: **Not set**
Password Bypass	Allows you to enable or disable the permission to bypass the System and the Internal HDD password, when they are set. The options are: • Disabled

Security	
	• Reboot bypass Default Setting: **Disabled**
Password Change	Allows you to enable the disable permission to the System and Hard Drive passwords when the admin password is set. Default Setting: **Allow Non-Admin Password Changes** is not selected
Strong Password	Allows you to enforce the option to always set strong passwords. Default Setting: **Enable Stron Password** is not selected.
OROM Keyboard Access	Allows you to set an option to enter the Option ROM Configuration screens using hotkeys during boot. The options are: • Enable • One Time Enable • Disable Default Setting: **Enable**
TPM Security	Allows you to enable the Trusted Platform Module (TPM) during POST. Default Setting: The option is disabled.
Computrace	Allows you to activate or disable the optional Computrace software The options are: • Deactivate • Disable • Activate **NOTE:** The Activate and Disable options will permanently activate or disable the feature and no further changes will be allowed Default Setting: **Deactivate**
CPU XD Support	Allows you to enable the Execute Disable mode of the processor. Default Setting: **Enable CPU XD Support**
Non-Admin Setup Changes	Allows you to determine whether changes to the setup options are allowed when an Administrator Password is set. If disabled the setup options are locked by the admin password.
Password Configuration	Allows you to determine the minimum and maximum length of Administrator and System passwords.
Admin Setup Lockout	Allows you to prevent users from entering Setup when an Administrator password is set. Default Setting: **Enable Admin Setup Lockout** is not selected.
Performance	
Multi Core Support	This field specifies whether the process will have one or all cores enabled. The performance of some applications will improve with the additional cores. This option is enabled by default.Allows you to enable or disable multi-core support for the processor. The options are:

Performance	
	• All • 1 • 2 Default Setting: **All**
Intel® SpeedStep™	Allows you to enable or disable the Intel SpeedStep feature. Default Setting: **Enable Intel SpeedStep**
C States Control	Allows you to enable or disable the additional processor sleep states. Default Setting: The options **C states**, **C3**, **C6**, **Enhanced C-states**, and **C7** options are enabled.
Limit CPUID	Allows you to limit the maximum value the processor Standard CPUID Function will support. Default Setting: **Enable CPUID**
Intel® TurboBoost™	Allows you to enable or disable the Intel TurboBoost mode of the processor. Default Setting: **Enable Intel TurboBoost**
Hyper-Thread Control	Allows you to enable or disable the HyperThreading in the processor. Default Setting: **Enabled**

Power Management	
AC Behavior	Allows you to enable or disable the computer from turning on automatically when an AC adapter is connected. Default Setting: **Wake on AC** is not selected.
Auto On Time	Allows you to set the time at which the computer must turn on automatically. The options are: • Disabled • Every Day • Weekdays Default Setting: **Disabled**
USB Wake Support	Allows you to enable USB devices to wake the system from Standby. **NOTE:** This feature is only functional when the AC power adapter is connected. If the AC power adapter is removed during Standby, the system setup will remove power from all of the USB ports to conserve battery power.
Wireless Radio Control	Allows you to enable or disable the feature that automatically switches from wired or wireless networks without depending on the physical connection. Default Setting: **Disabled**
Wake on LAN	Allows you to enable or disable the feature that powers on the computer from the Off state when triggered by a LAN signal. Default Setting: **Disabled**
ExpressCharge	Allows you to enable or disable the ExpressCharge feature. The options are: • Standard

Power Management	
	• ExpressCharge Default Setting: **Standard**
Charger Behavior	Allows you to enable or disable the battery charger. The options are; • Disabled • Enabled Default Setting: **Enabled**

POST Behavior	
Adapter Warnings	Allows you to enable or disable the system setup (BIOS) warning messages when you use certain power adapters. Default Setting: **Enable Adapter Warnings**
Mouse/Touchpad	Allows you to define how the system handles mouse and touch pad input. The options are: • Serial Mouse • PS2 Mouse • Toushpad/PS-2 Mouse Default Setting: **Touchpad/Mouse 2**
Numlock Enable	Allows you to enable the Numlock option when the computer boots. Default Setting: **Enable Network**
USB Emulation	Allows you to enable or disable the Legacy USB Emulation. Default Setting: **Enable Legacy USB Emulation** is selected.
Fn Key Emulation	Allows you to set the option where the <Scroll Lock> key is used to simulate the <Fn> key feature. Default Setting: **Enable Fn Key Emulation**
POST HotKeys	Allows you enable the sign-on screen message display indicating the keystroke sequence to access the System Setup option menu. Default Setting: **Enable F12 Boot Option Menu**
Fastboot	Allows to set the option to speed up the boot process. The options are: • Minimal • Thorough • Auto Default Setting: **Thorough**

Virtualization Support	
Virtualization	Allows you to enable or disable the Intel Virtualization Technology. Default Setting: **Enable Intel Virtualization Technology**

Wireless	
Wireless Switch	Allows to set the wireless devices that can be controlled by the wireless switch. The options are: • WWAN • WLAB • Bluetooth Default Setting: All the options are selected.
Wireless Device Enable	Allows you to enable or disable the wireless devices.

Maintenance	
Service Tag	Displays the Service Tag of your computer.
Asset Tag	Allows you to create a system asset tag if an asset tag is not already set. This option is not set by default.
SERR Messages	Controls the SERR message mechanism. This option is not set by default. Some graphics cards require that the SERR message mechanism be disabled.

System Logs	
BIOS Events	Allows you to view and clear the System Setup (BIOS) POST events.
DellDiag Events	Allows you to view and clear the DellDiag events.
Thermal Events	Allows you to view and clear the Thermal events.
Power Events	Allows you to view and clear the Power events.
BIOS Progress Events	Allows you to view and clear the BIOS Progress Events.

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Dijagnostika

Diagnostics

Device Status Lights

	Turns on when you turn on the computer and blinks when the computer is in a power management mode.
	Turns on when the computer reads or writes data.
	Turns on steadily or blinks to indicate battery charge status.
	Turns on when wireless networking is enabled.
	Turns on when a card with Bluetooth wireless technology is enabled. To turn off only the Bluetooth wireless technology function, right-click the icon in the system tray and select **Disable Bluetooth Radio**

Battery Status Lights

If the computer is connected to an electrical outlet, the battery light operates as follows:

Alternately blinking amber light and blue light	An unauthenticated or unsupported non-Dell AC adapter is attached to your laptop.
Alternately blinking amber light with steady blue light	Temporary battery failure with AC adapter present.
Constantly blinking amber light	Fatal battery failure with AC adapter present.
Light off	Battery in full charge mode with AC adapter present.
Solid white light on	Battery in charge mode with AC adapter present.

Battery Charge and Health

To check the battery charge, press and release the status button on the battery charge gauge to illuminate the charge-level lights. Each light represents approximately 20 percent of the total battery charge. For example, if four lights are on, the battery has 80 percent of its charge remaining. If no lights appear, the battery has no charge.

To check battery health using the charge gauge, press and hold the status button on the battery charge gauge for at least 3 seconds. If no lights appear, the battery is in good condition and more than 80 percent of its original charge

capacity remains. Each light represents incremental degradation. If five lights appear, less than 60 percent of the charge capacity remains, and you should consider replacing the battery.

Keyboard Status Lights

The lights located above the keyboard indicate the following:

Turns on when the numeric keypad is enabled.

Turns on when the Caps Lock function is enabled.

Turns on when the Scroll Lock function is enabled.

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Kontakt sa Dell-om

Kontaktiranje kompanije Dell

NAPOMENA: Ako nemate aktivnu vezu sa Internetom, kontakt informacije možete pronaći na fakturi, otpremnici, računu ili katalogu Dell proizvoda.

Dell nudi nekoliko opcija za onlajn i telefonsku podršku i servis. Dostupnost zavisi od zemlje i proizvoda, a neke usluge možda neće biti dostupne u vašoj oblasti. Ako želite da kontaktirate Dell u vezi prodaje, tehničke podrške ili pitanja u vezi korisničkih usluga:

1. Posetite **support.dell.com**.
2. Izaberite svoju kategoriju podrške.
3. Ako ne živite u Sjedinjenim Državama, izaberite međunarodni broj vaše zemlje u dnu stranice **support.dell.com** ili izaberite **All (Sve)** da biste videli ostale mogućnosti.
4. Izaberite odgovarajuću uslugu ili vezu za podršku na osnovu vaših potreba.