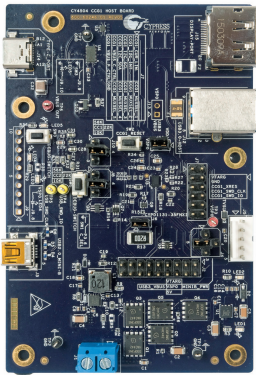
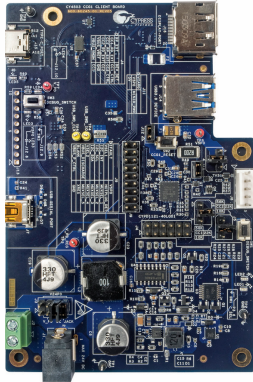


CY4501 CCG1 DVK

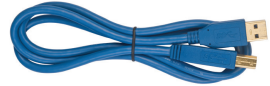
Step 1: Unpack kit contents. Download and install the latest kit setup file "CY4501 CCG1 DVK COMPLETE SETUP" from www.cypress.com/go/CY4501



CCG1 HOST BOARD

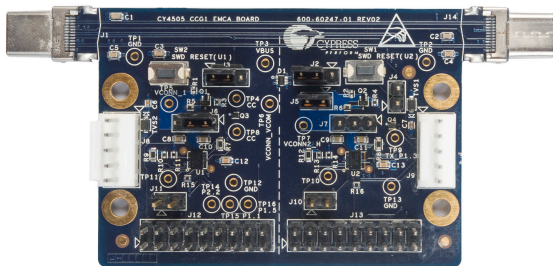


CCG1 CLIENT BOARD



ONE SUPERSPEED USB
TYPE-A TO TYPE-B CABLE

TWO USB 2.0 TYPE-A TO
MINI-B CABLES



CCG1 EMCA BOARD



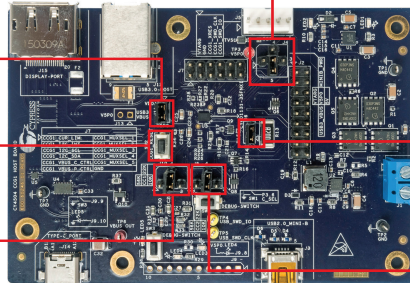
MINIPROG3

Step 2: Verify jumper settings on the CCG1 Host board. Use SuperSpeed USB Type-A to Type-B cable to connect a PC with the Host board's SuperSpeed USB Type-B connector (receptacle) J12.

J11, Provision for Measuring Current Consumption of CCG1 (Default Short)

SW2, CCG1 Reset Switch

J10, CC1 Rp Selection for Current Advertisement
 1-2: 900 mA for USB SS
2-4: 1.5 A (Default Setting)
 2-3: 3.0 A



J4, Decides the 5 V Power Source for the Board

1-2: Power from MiniProg3

2-3: Power from USB Type-C Connector

2-4: Power from J3 USB Mini-B Connector

2-5 : Power from J12 USB SuperSpeed Connector (Default)

J6, Provision for Measuring Current Consumption on VCONN (Default Short)

J8, CC2 Rp Selection for Current Advertisement

1-2: 900 mA for USB SS

2-4: 1.5 A (Default Setting)

2-3: 3.0 A

Step 3: Verify jumper settings on the CCG1 Client board. Using a USB 2.0 Type-A to Mini-B cable, connect a PC to the USB Mini-B connector J7 of the Client board to provide power.

J11, Decides the Power Source
 1-2: Power from MiniProg3

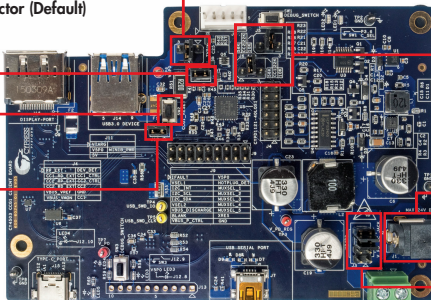
2-3: 5 V power regulated from 24 VDC, Also see J3 settings.

2-4: Power from J7 USB Mini-B Connector (Default)

J10, Provision for Measuring Current Consumption on VCONN (Default Short)

SW2, CCG1 Reset Switch

J12, Provision for Measuring Current Consumption of CCG1 (Default Short)



J5, J6, Rp Selection on CC2 and CC1

1-2: 900 mA for USB SS

2-4: 1.5 A (Default Setting)

2-3: 3.0 A

24 V Power Jack

J3, Decides the Power Source
 1-2 and 3-4 Shorted: Power from Type-C Connector

5-6 and 7-8 Shorted: Power from 24 V Power Jack (Default Short)

Step 4: Verify jumper settings on the CCG1 EMCA board.

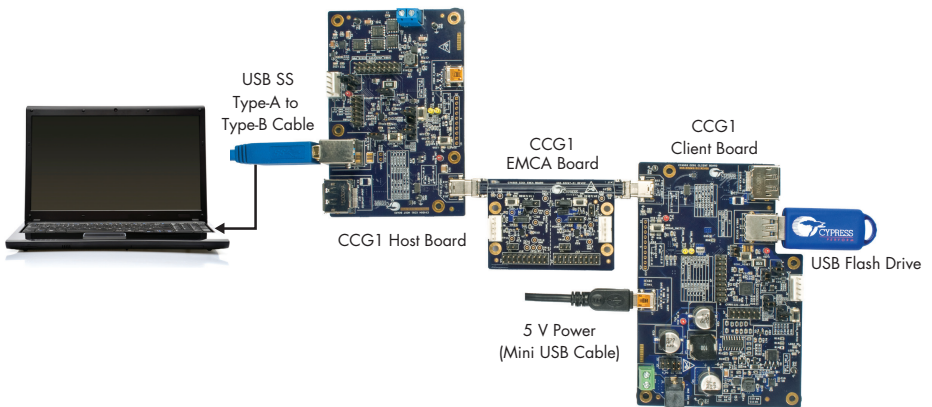
J3, Controls Disconnection of VCONN Ra Resistor for J1 Type-C Connector
1-2 Short: U1 (Near End CCG1) Controls Disconnection (Default Setting)
2-3 Short: U2 (Far End CCG1) Controls Disconnection

J6, U1 VDD Power Selection
1-2 Short: U1's VDD Connects to VCONN_COM (Default Setting)
2-3 Short: U1's VDD Connects to J1's (Type-C Connector) VCONN

J2, Controls Disconnection of VCONN Ra Resistor for J14 Type-C Connector
1-2 Short: U2 (Near End CCG1) Controls Disconnection
2-3 Short: U1 (Far End CCG1) Controls Disconnection (Default Setting)

J7, U2 VDD Power Selection.
1-2 Short: U2's VDD Connects to VCONN_COM
2-3 Short: U2's VDD Connects to J14's (Type-C Connector) VCONN
Open: Default Setting

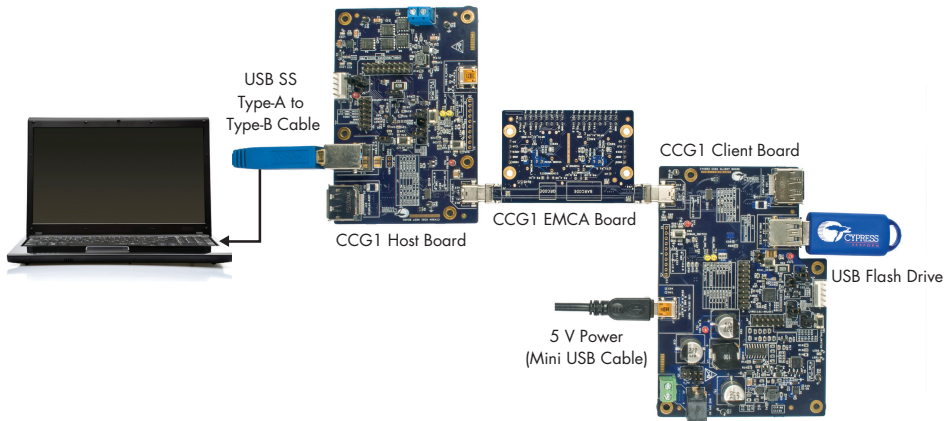
Step 5: Connect one end of the EMCA board to the Host board and its other end to the Client board. Plug a USB drive (not provided with the kit) into the Client board. Verify your setup as shown in the picture below. To evaluate SuperSpeed USB data transfers, it is recommended to use a SuperSpeed USB flash drive.



CY4501 CCG1 DVK

Step 6: Observe enumeration of the USB drive connected to the Client board on the PC connected to the Host board. Observe the SuperSpeed USB data transfer speed by transferring large files.

Step 7: Disconnect the EMCA board from host and client boards. Repeat the connection in Step 5 with the EMCA board flipped upside down.



Step 8: Observe enumeration of the USB drive connected to the Client board on the PC connected to the Host board even with the EMCA board flipped. Also, observe the SuperSpeed USB data transfer speed by transferring large files. This demonstrates orientation adjustment of the Type-C interface. This step can be repeated with the EMCA board in any other orientation.

Step 9: For more details, refer to the *CY4501 CCG1 Development Kit Guide.pdf* located at C:\Program Files (x86)\Cypress\CY4501 CCG1 DVK\1.0\Documentation for 64-bit Windows operating systems or C:\Program Files\Cypress\CY4501 CCG1 DVK\1.0\Documentation for 32-bit Windows operating systems.

For the latest information about this kit, visit www.cypress.com/go/CY4501