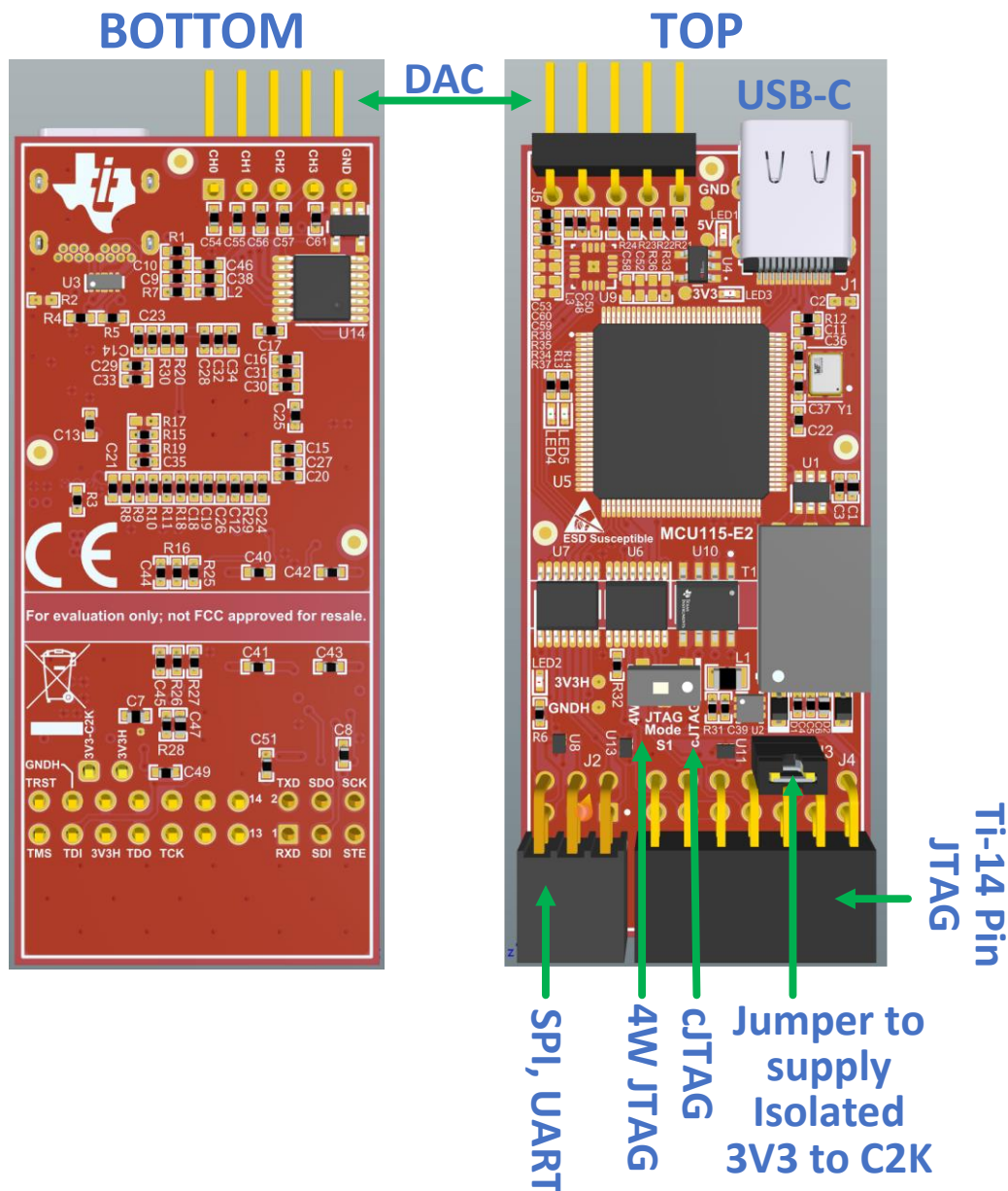
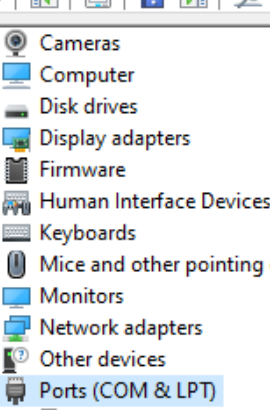


Isolated XDS110 Emulator Setting

1. Use switch 'S1' to select cJTAG (right) or 4 wire JTAG (left) as per requirement and connect 'J4' (Ti 14 pin, 2x7, 100mil) to the target with correct polarity. Signals are labelled on the bottom side of the emulator board.
2. Populate the optional jumper 'J3' if target needs isolated 3V3 supply from this emulator board. If target board already have its own 3V3 power supply then J3 is optional (Removing jumper is recommended when not in use).
3. This emulator board contains on board DAC128S085 (4-channel, 12 bit Digital-to-Analog Converter with SPI interface) for test and debug. Interfacing resources and examples can be found on following links –
 - a. DAC128S085 – <https://www.ti.com/product/DAC128S085>
 - b. DAC128S085EVM – <https://www.ti.com/tool/DAC128S085EVM>
 - c. Refer TIDM02010 user guide and example code for C2K to DAC SPI interface – <https://www.ti.com/tool/TIDM-02010>
 - d. Universal Motor Lab User Guide https://www.ti.com/lit/ug/spruj26/spruj26.pdf?ts=1690835477447&ref_url=https%253A%252F%252Fwww.google.com%252F
4. DAC's SPI signals (SDO, SDO, SCK, STE) and UART (RX, TX) are connected to 'J2' (2x3, 100mil) through isolators.



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- Diagram illustrating the TIDM02010 module with the following connections:
- Ti-14 Pin JTAG**: Connected to the JTAG pins (TRST, TMS, TCK, TDO, GNDH, 3V3H).
 - 8 Pin for TIDM02010**: Connected to the 8-pin header (pins 1-8).
 - UART**: Connected to the UART pins (TXD, RXD, GNDH, 3V3H).
 - DAC**: Connected to the DAC pins (DAC, GNDH, 3V3H).

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- The screenshot shows the Windows Device Manager window. The 'Ports (COM & LPT)' category is expanded, and a red rectangle highlights the following entries:
- Intel(R) Active Management Technology - SOL (COM3)
 - XDS110 Class Application/User UART (COM23)
 - XDS110 Class Auxiliary Data Port (COM24)
- Below this, the 'Texas Instruments Debug Probes' category is expanded, and another red rectangle highlights the following entries:
- XDS110 Class Data Port
 - XDS110 Class Debug Probe

7. Open the target configuration window in CCS project to set probe in either 2 wire cJTAG or 4- Wire JTAG.
 - a. 2-wire cJTAG mode as shown below. Make sure JTAG TCLK is at or below 1.5MHz in this mode.

Connection Properties		
Set the properties of the selected connection.		
Board Data File	auto generate	
Debug Probe Selection	Only one XDS110 installed	
Power Selection	Target supplied power	
Voltage level	Default	
The JTAG TCLK Frequency (MHz)	Fixed with user specified value	
-- Enter a value from 100.0kHz to 5.5MHz	1.5MHz	
JTAG Signal Isolation	Do isolate JTAG signals at final disconnect	
JTAG / SWD / cJTAG Mode	cJTAG (1149.7) 2-pin advanced modes	
Target Scan Format	OSCAN2 format - faster transitions	
Auxiliary COM Port Connection	Aux COM port is target UART port	

- b. 4-wire JTAG mode as shown below. Make sure JTAC TCLK is at default 5.5MHz or below.

Connection Properties		
Set the properties of the selected connection.		
Board Data File	auto generate	
Debug Probe Selection	Only one XDS110 installed	
Power Selection	Target supplied power	
Voltage level	Default	
The JTAG TCLK Frequency (MHz)	Fixed default 5.5MHz frequency	
JTAG Signal Isolation	Do isolate JTAG signals at final disconnect	
JTAG / SWD / cJTAG Mode	JTAG (1149.1), SWD and cJTAG are disabled	