

UART header pinout

The dual UART header on the FCDEV3B is J301, and it has the following pinout:

GND	1	2	GND
TX_IRDA	3	4	TX_MODEM
RX_IRDA	5	6	RX_MODEM
NC	7	8	RTS_MODEM
NC	9	10	CTS_MODEM

Pin 1 is toward the power input connector.

JTAG header pinout

The JTAG header on the FCDEV3B is J310, and it has the following pinout:

TMS	1	2	nTESTRESET
TDI	3	4	GND
Vio	5	6	NC
TDO	7	8	GND
TCK return	9	10	GND
TCK	11	12	GND
EMU0	13	14	EMU1

Pin 1 is toward the power input connector.

Dual UART connection with an FT2232D adapter

If you are going to connect to both Calypso UARTs by way of an FT2232D USB dual UART, the convention established by the Mother of FreeCalypso is that Calypso's MODEM UART should be connected to FT2232D channel A, and the IrDA UART should be connected to channel B. Connect jumper wires as follows:

FT2232D signal	Calypso signal
ADBUS0	RX_MODEM
ADBUS1	TX_MODEM
ADBUS2	CTS_MODEM
ADBUS3	RTS_MODEM
BDBUS0	RX_IRDA
BDBUS1	TX_IRDA

UART and JTAG connection with an FT2232D adapter

If you are going to reconfigure the FT2232D adapter from the default dual UART configuration into the JTAG+UART configuration, please note the following:

- You must use FT2232D channel A for JTAG, leaving channel B for the UART, as the MPSSE mode used for JTAG is only available on channel A.
- When you are able to connect to only one of the two Calypso UARTs, like in the present JTAG+UART arrangement, the IrDA UART is the one you would typically want to connect to if you are working with FreeCalypso software. FreeCalypso firmwares follow TI's convention of presenting a classic ASCII AT command interface on the MODEM UART and presenting a development interface (RVTMUX) on the IrDA UART. You will certainly need the RVTMUX interface for development, and our AT-over-RVTMUX extension allows most AT commands (all except data services) to be issued over RVTMUX as well, hence the classic ASCII AT command interface on the MODEM UART is typically not needed during low-level development.

If you are going to follow the recommendations above, connect your jumper wires as follows:

FT2232D signal	Calypso signal
ADBUS0	TCK
ADBUS1	TDI
ADBUS2	TDO
ADBUS3	TMS
BDBUS0	RX_IRDA
BDBUS1	TX_IRDA

MCSI header pinout

The MCSI header on the FCDEV3B is J311, and it has the following pinout:

1	MCSI_CLK
2	MCSI_RXD
3	MCSI_TXD
4	MCSI_FSYNCH
5	GND

Pin 1 is toward the edge of the board, away from the power input connector.