

1.7.1. 14-pin JTAG header
Usual pin-out for 14-pin JTAG
header (often used for ARM)

- 1 - Vddh (+3.3v)
- 2 - Vss (ground)
- 3 - nTRST
- 4 - Vss (ground)
- 5 - TDI
- 6 - Vss (ground)
- 7 - TMS
- 8 - Vss (ground)
- 9 - TCK
- 10 - Vss (ground)
- 11 - TDO
- 12 - nRESET (optional)
- 13 - Vddh (+3.3v)
- 14 - Vss (ground)

1.7.2. 20-pin JTAG header
Usual pin-out for 20-pin JTAG
header (sometimes used for ARM)

- 1 - Vddh (+3.3v)
- 2 - Vddh (+3.3v)
- 3 - nTRST
- 4 - Vss (ground)
- 5 - TDI
- 6 - Vss (ground)
- 7 - TMS
- 8 - Vss (ground)
- 9 - TCK
- 10 - Vss (ground)
- 11 - TDO
- 12 - Vss (ground)
- 13 - TDO
- 14 - Vss (ground)
- 15 - nRST
- 16 - Vss (ground)
- 17 - TDO
- 18 - Vss (ground)
- 19 - TDO
- 20 - Vss (ground)

1.7.3. 8-pin JTAG header
Usual pin-out for 8-pin JTAG
header, often used for PLD
programming

- 1 - vddh (+3.3v)
- 2 - TDO
- 3 - TDI
- 4 - nTRST
- 5 - TMS
- 6 - TMS
- 7 - vss (ground)
- 8 - TCK

***Board Area = 40mm X 31mm

FULL SPEED USB, mini Con

RX LED TX LED TARG PWR LED RESET LED
USB PWR LED

JTAG PROGRAM/DEBUG 14-pin std & TX & RX - ie 16-pin

USE J3 TO ENABLE/DISABLE JTAG
USE J1 FOR TARGET POWERED, USE J2 FOR PC POWERED
SN74LVC4245 IS FARNELL PN - 1053499
FT232RL is farnell PN 9519793
93c46 is farnell pn 1224432
6MHz XTAL is farnell P/N - 9713310

Title		
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