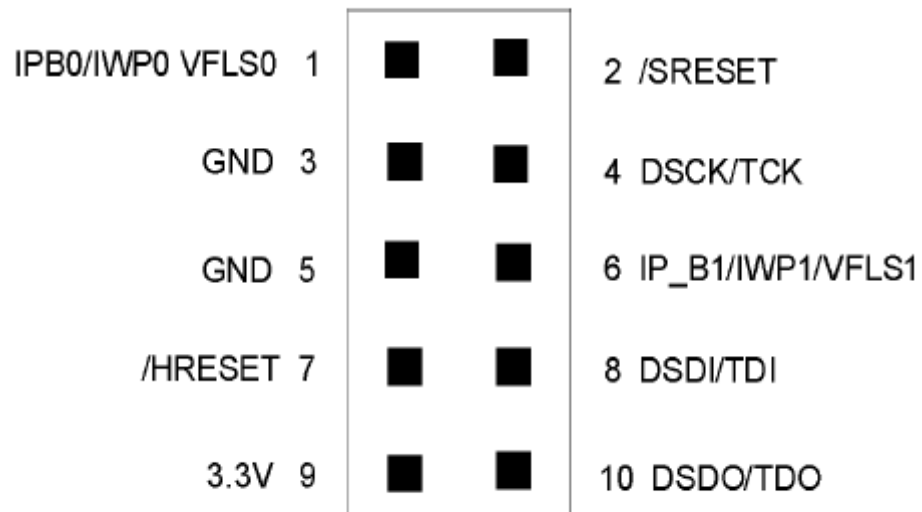


JTAG Connector Pin-outs

New Level Telecom

PowerPC

10-Pin PowerPC 5xx/8xx BDM Connector Pin-outs



PowerPC 5xx/8xx Terminations

Signal Name Description

DSCCK/TCK External 10K pull-down

DSDI External 10K pull-down

16-Pin PowerPC

5200/6xx/7xx/74xx/82xx/83xx

85xx/86xx/9xx JTAG Connector Pin-outs

TDO	1	■	■	2	N/C
TDI	3	■	■	4	TRST
/QREQ	5	■	■	6	EXPSENSE
TCK	7	■	■	8	N/C
TMS	9	■	■	10	N/C
/SRESET	11	■	■	12	GND
/HRESET	13	■	■	14	N/C
/CHKSTPO	15	■	■	16	GND

PowerPC 6xx/7xx/82xx Terminations

Signal Name Description

TRST External 4.7K pull-up

EXPSENSE External 1K pull-up

16-Pin AMCC 40x/44x Connector Pin-outs

TDO	1	■	■	2	N/C
TDI	3	■	■	4	N/C
N/C	5	■	■	6	+POWER
TCK	7	■	■	8	N/C
TMS	9	■	■	10	N/C
-HALT	11	■	■	12	N/C
N/C	13	■	■	14	KEY
N/C	15	■	■	16	GND

NOTE:

The above pin-out information is appropriate for the 403 GCX boards. The pin-out information for the 405 GP design differs only in that pin 4 is a TRST instead of a N/C.

14-Pin PowerPC 55xx JTAG Connector Pin-outs

TDI - 1	■	■	2 - NC (GROUND)
TDO - 3	■	■	4 - GROUND
TCK - 5	■	■	6 - GROUND
NC - 7	■	■	8 - NC
RESET - 9	■	■	10 - TMS
Vcc Target - 11	■	■	12 - NC (GROUND)
RDY - 13	■	■	14 - TRST

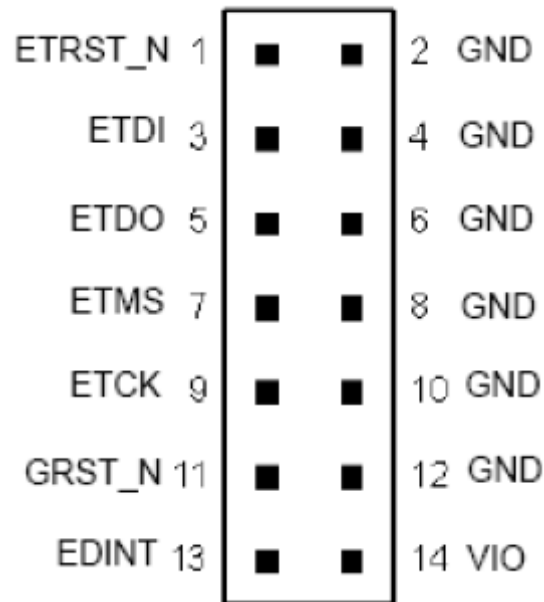
ColdFire

ColdFire 26-Pin BDM Connector *Pin-outs*

RESERVED	1	■	■	2	$\overline{\text{BKPT}}$
GND	3	■	■	4	DSCLK
GND	5	■	■	6	RESERVED
$\overline{\text{RESET}}$	7	■	■	8	DSI
VCC_CPU	9	■	■	10	DSO
GND	11	■	■	12	PST3
PST2	13	■	■	14	PST1
PST0	15	■	■	16	DDATA3
DDATA2	17	■	■	18	DDATA1
DDATA0	19	■	■	20	GND
RESERVED	21	■	■	22	RESERVED
GND	23	■	■	24	CLK_CPU
VCC_CPU	25	■	■	26	$\overline{\text{TEA}}$

MIPS

MIPS 14-Pin EJTAG Connector Pin-outs



MIPS 14-Pin EJTAG Terminations

Signal Name Description

ETCK External 1K pull-up

ETM External 1K pull-up

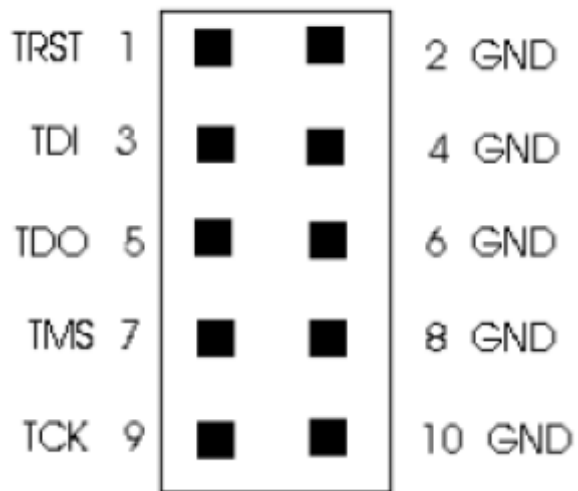
ETDI External 1K pull-up

ETRST_N External 1K pull-down

EDINT External 1K pull-up

GRIST_N External 1K pull-up

MIPS Broadcom 10-Pin Connector Pin-outs



MIPS Broadcom 10-Pin EJTAG Terminations

Signal Name Description

TCK 1K pull-up resistor

TMS 1K pull-up resistor

TDI 1K pull-up resistor

TRST 1K pull-down resistor

MIPS Philips 20-Pin EJTAG Connector Pin-outs

Jtag_trst_n	1	■	■	2	GND
Jtag_tdi/din	3	■	■	4	GND
Jtag_tdo/ejtag_tpc	5	■	■	6	GND
Jtag_tms	7	■	■	8	GND
Jtag_tck	9	■	■	10	GND
JTAG_RST	11	■	■	12	GND
Ejtag_pcst[0]	13	■	■	14	GND
Ejtag_pcst[1]	15	■	■	16	GND
Ejtag_pcst[2]	17	■	■	18	GND
Ejtag_dclk	19	■	■	20	GND

MIPS Philips 20-Pin EJTAG Terminations

Signal Name Description

jtag_trst_n 10K pull-up resistor

jtag_tdi 10K pull-up resistor

jtag_tdo/ejtag_tpo 33 ohm series resistor

jtag_tms 10K pull-up resistor

jtag_tck 10K pull-up resistor

jtag_rst 10K pull-up resistor

ejtag_pcst[0] 33 ohm series resistor

ejtag_pcst[1] 33 ohm series resistor

ejtag_pcst[2] 33 ohm series resistor

MIPS IDT 24-Pin ETAG Connector Pin-outs

jtag_trst_n	1	■	■	2	GND
jtag_tdi/din	3	■	■	4	GND
jtag_tdo/ejtag_tpo	5	■	■	6	GND
jtag_tms	7	■	■	8	GND
jtag_tck	9	■	■	10	GND
jtag_rst_n	11	■	■	12	GND
ejtag_pcst[0]	13	■	■	14	GND
ejtag_pcst[1]	15	■	■	16	GND
ejtag_pcst[2]	17	■	■	18	GND
ejtag_dclk	19	■	■	20	GND
ejtag_debugboot	21	■	■	22	GND
VIO	23	■	■	24	GND

MIPS IDT 24-Pin EJTAG Terminations

Signal Name Description

jtag_trst_n 10K pull-up resistor

jtag_tdi 10K pull-up resistor

jtag_tdo/ejtag_tpo 33 ohm series resistor

jtag_tms 10K pull-up resistor

jtag_tck 10K pull-up resistor

jtag_rst_n 10K pull-up resistor

ejtag_pcst[0] 33 ohm series resistor

ejtag_pcst[1] 33 ohm series resistor

ejtag_pcst[2] 33 ohm series resistor

ejtag_dclk 33 ohm series resistor

ejtag_debugboot 10K pull-down resistor

VIO Must be connected to the VCC I/O supply

MIPS NEC 26-Pin EJTAG Connector Pin-outs

TRCCLK	A1	■	■	B1	GND
TRCDATA0	A2	■	■	B2	GND
TRCDATA1	A3	■	■	B3	GND
TRCDATA2	A4	■	■	B4	GND
TRCDATA3	A5	■	■	B5	GND
TRCEND	A6	■	■	B6	GND
JTDI/RMODE#	A7	■	■	B7	GND
JTCK	A8	■	■	B8	GND
JTMS	A9	■	■	B9	GND
JTDO	A10	■	■	B10	GND
JTRST#	A11	■	■	B11	N/C
BRKGIO#	A12	■	■	B12	N/C
N/C	A13	■	■	B13	(JTMS + 4.7K ohms)

MIPS NEC 26-Pin EJTAG Terminations

Signal Name Description

TRCCLK 33 ohm series resistor

TRCDATA0 33 ohm series resistor

TRCDATA1 33 ohm series resistor

TRCDATA2 33 ohm series resistor

TRCDATA3 33 ohm series resistor

TRCEND 33 ohm series resistor

MIPS Toshiba 40-Pin Connector Pin-outs

TRESET 1	■ ■	2 GND
TDI/DINT 3	■ ■	4 GND
TDO 5	■ ■	6 GND
TMS 7	■ ■	8 GND
TCK 9	■ ■	10 GND
VCC 11	■ ■	12 GND
RESET 13	■ ■	14 GND
PCST0 15	■ ■	16 GND
PCST1 17	■ ■	18 GND
PCST2 19	■ ■	20 GND
PCST3 21	■ ■	22 GND
PCST4 23	■ ■	24 GND
DCLK 25	■ ■	26 GND
PCST5 27	■ ■	28 GND
PCST6 29	■ ■	30 GND
PCST7 31	■ ■	32 GND
PCST8 33	■ ■	34 GND
TPC1 35	■ ■	36 GND
TPC2 37	■ ■	38 GND
TPC3 39	■ ■	40 GND

MIPS Toshiba 40-Pin EJTAG Terminations

Signal Name Description

TRESET 10K pull-up resistor

TDI/DINT 10K pull-up resistor

TDO 33 ohm series resistor

TMS 10K pull-up resistor

RESET 10K pull-up resistor

PCST0 33 ohm series resistor

PCST1 33 ohm series resistor

PCST2 33 ohm series resistor

PCST3 33 ohm series resistor

PCST4 33 ohm series resistor

DCLK 33 ohm series resistor

PCST5 33 ohm series resistor

PCST6 33 ohm series resistor

PCST7 33 ohm series resistor

PCST8 33 ohm series resistor

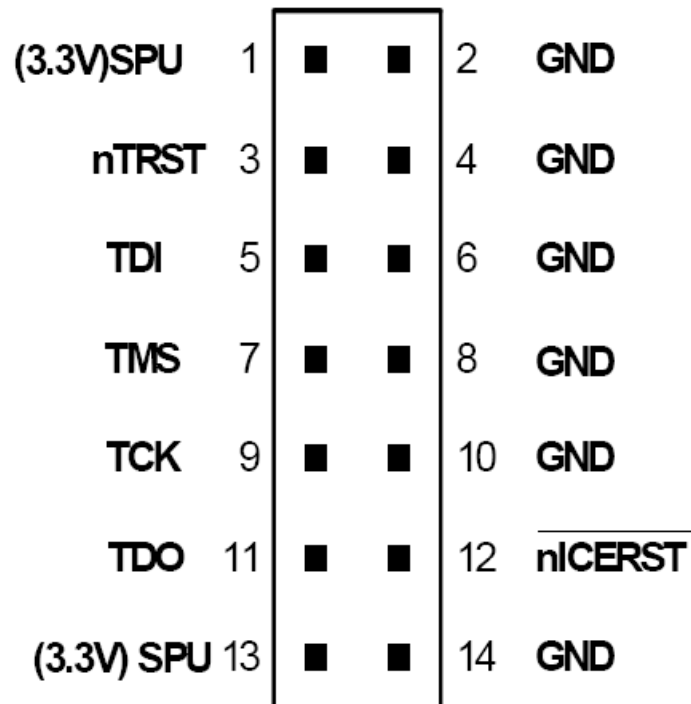
TPC1 33 ohm series resistor

TPC2 33 ohm series resistor

TPC3 33 ohm series resistor

ARM

14-Pin ARM7 JTAG Connector Pin-outs



ARM7 Terminations

Signal Name Description

TCK - Test Clock External 5K pull-down

TMS - Test Mode External 5K pull-up on PCB

TDI - Test Data Input External 5K pull-up on PCB

TDO - Test Data Output External 5K pull-up on PCB

nTRST - Reset Tap Controller External 2K pull-up on PCB

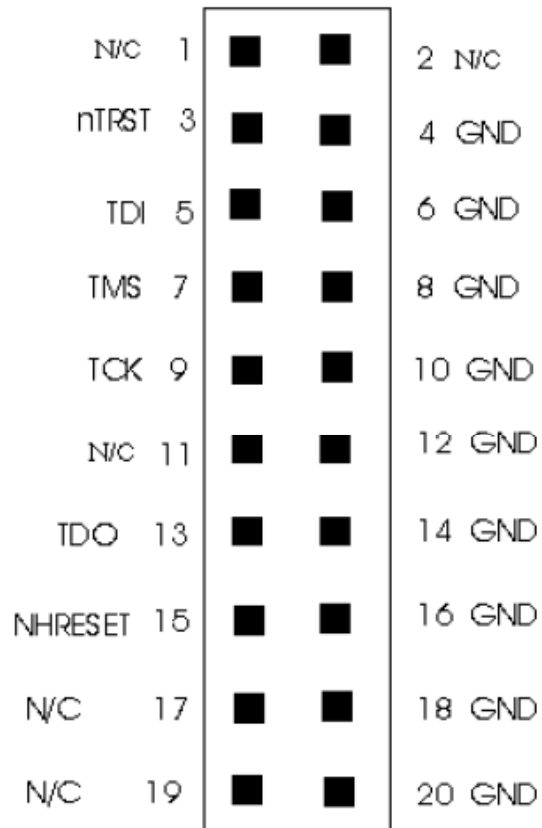
/nICERST (nPOR) External 2K pull-up on PCB

20-Pin ARM7 JTAG Connector Pin-outs

Vtref 1	■	■	2 V _{SUPPLY}
nTRST 3	■	■	4 GND
TDI 5	■	■	6 GND
TMS 7	■	■	8 GND
TCK 9	■	■	10 GND
RTCK 11	■	■	12 GND
TDO 13	■	■	14 GND
NSRST 15	■	■	16 GND
DBGREQ 17	■	■	18 GND
DBGACK 19	■	■	20 GND

XSCALE

20-Pin XScale JTAG Connector Pin-outs



XScale Terminations

Signal Name	Description
/TRST	4.7K pull-down
/HRESET	2.7K pull-up