

Blackhawk™ 14e-20t_cTI Pin Converter

P/N: 50-ADP-14e_TI-20t_cTI-0

Guidelines and Usage

The pin converter (P/N: 50-ADP-14e_TI-20t_cTI-0) described here allows an emulator with the standard 14-pin JTAG connection to connect to the new, 20-pin compact TI (cTI) JTAG header. An example of this new, 20-pin header can be found on the TI DAVINCI EVM. Using this adapter provides backwards compatibility to standard debug connections and does not perform any processing or contain any on-board logic. It is strictly a pin converter, routing only pins 1-14, and can be used with XDS510™ and XDS560™-class emulators with standard 14-pin socket connector.

Connection Diagram

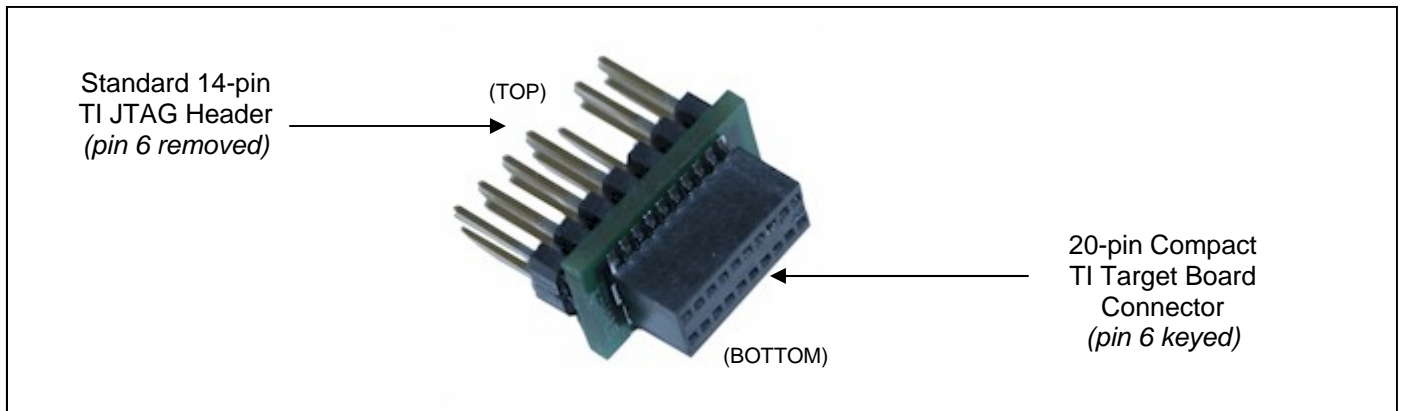


Figure 1 - Connector Descriptions

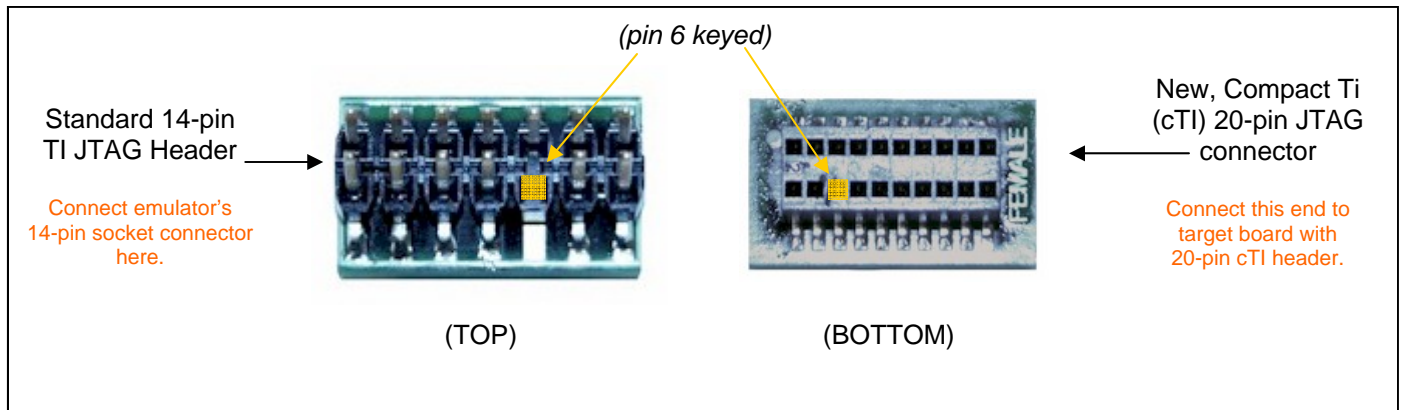


Figure 2 - Close-up of pin converter (top and bottom)

TMS	o	1	2	o	nTRST	TMS	o	1	2	o	nTRST
TDI	o	3	4	i	TDIS	TDI	o	3	4	i	TDIS
TVD	i	5	6	x	(key)	TVD	i	5	6	x	(key)
TDO	i	7	8	x	GND0	TDO	i	7	8	x	GND0
RTCK	i	9	10	x	GND1	RTCK	i	9	10	x	GND1
TCK	o	11	12	x	GND2	TCK	o	11	12	x	GND2
EMU0	b	13	14	b	EMU1	EMU0	b	13	14	b	EMU1
nSRST	o	15	16	x	GND3						
EMU2	b	17	18	b	EMU3						
EMU4	b	19	20	x	GND4						

i input signals from the target system
 o output signals to the target system
 b bi-directional signals
 x not signals
 n prefix for active low signals

Figure 3 - 20 and 14 pin signal mapping

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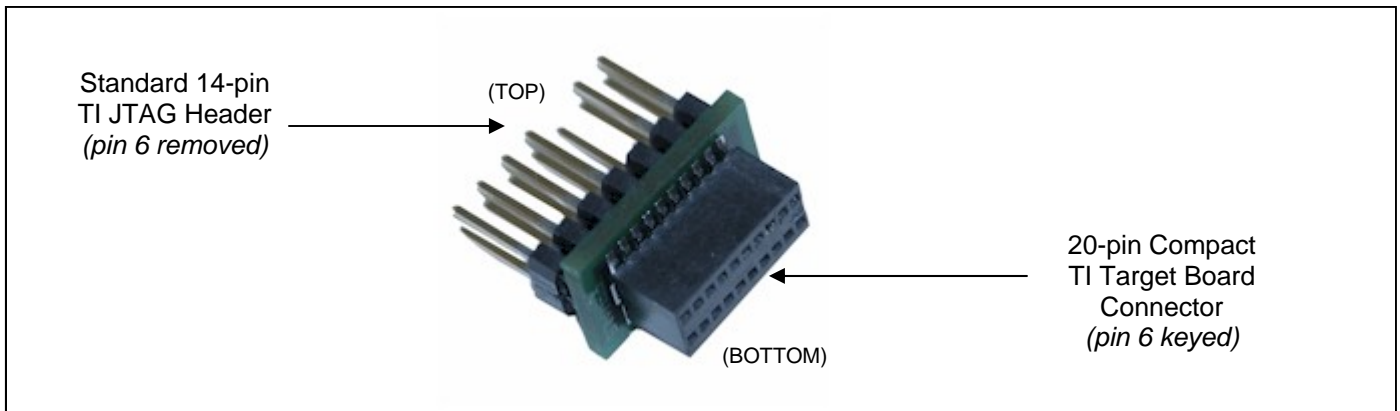


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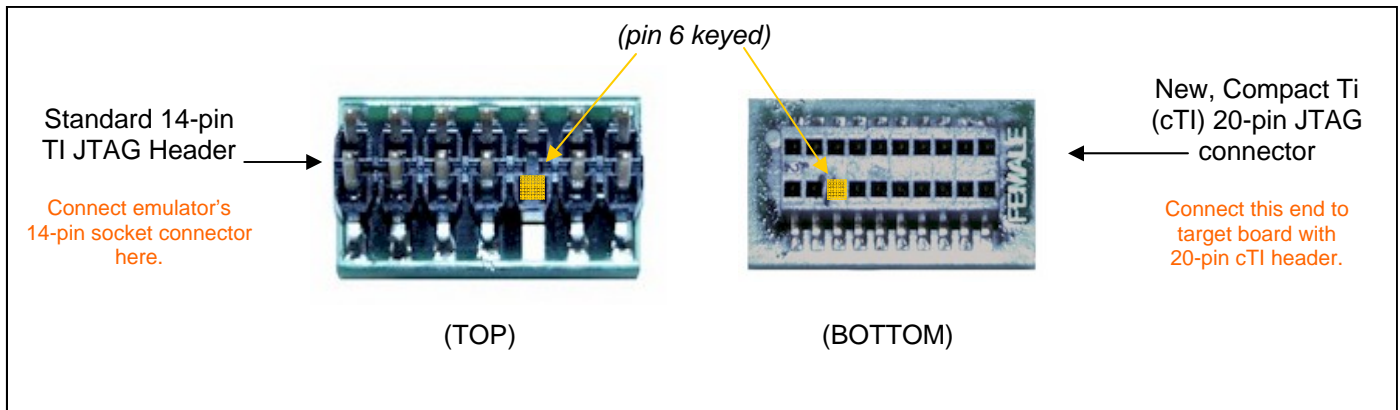


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TVD	i	5	6	x	(key)	TVD	i	5	6	x	(key)
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RTCK	i	9	10	x	GND1	RTCK	i	9	10	x	GND1
TCK	o	11	12	x	GND2	TCK	o	11	12	x	GND2
EMU0	b	13	14	b	EMU1	EMU0	b	13	14	b	EMU1
nSRST	o	15	16	x	GND3						
EMU2	b	17	18	b	EMU3						
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