Texas Instruments

TMS320C54x DSKplus Adapter Kit for TLV1562EVM and TLVx544/x548EVM

Installation Guide

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TMS320C54x DSKplus Adapter Kit for TLV1562EVM and TLVx544/x548EVM

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ABSTRACT

The TMS320C54x DSKplus Adapter Kit was developed to provide a convenient interface for the TLV1562 and TLVx544/x548 evaluation modules. The kit includes 36 position three-row headers and sockets to provide a direct connection to the C54x DSK and standard ribbon cables to connect to the evaluation modules.

Kit Contents

The adapter kit includes:

ITEM	QUANTITY	MANUFACTURER	PART NUMBER	CONTACT
36-pin three-row headers	4	Crane Connectors	PEG36TS-TBR	1–800–676–7644
36-pin three-row sockets	4	Crane Connectors	ATP36TS-TCB	
26-pin dual-row header	2	3M	30326-6002HB	1–800–225–5373
34-pin dual-row header	1	3M	30334-6002HB	
26-pin cable assembly	1	Galaxy Electronics	F26 6″ ASBLY	1–972–234–2202
34-pin cable assembly	1	Galaxy Electronics	F34 6″ ASBLY	
Printed-circuit board	1	Texas Instruments	C54x Adapter	

Complementary hardware that can be purchased separately includes:

DESCRIPTION	ORDER PART NUMBER	
	HARDWARE	LITERATURE
TMS320C54x DSKplus DSP Starter Kit	TMDS320000L0	SPRU191
10-bit, 2Msample, A/D converter, parallel data output Evaluation Module (EVM)	TLV1562 with TLC5618 and THS5651 DAC EVM	SLAU031
12-bit 200KSPS, A/D converter, 4/8 channels, serial data output EVM	TLVx544/x548 EVM	SLAU029

Preferred Installation

Headers and sockets are loose to accommodate existing DSK configurations.

However for new installations the preferred method of installation is detailed below.

TMS320C54x DSKplus

The TMS320C54x DSKplus is supplied with no components installed at locations JP1, JP2, JP3, JP4, JP5, and JP6. It is the user's responsibility to install the appropriate connectors at locations JP1, JP3, JP4, and JP5 to properly interface the C54x adapter board.

The 36 position three-row sockets should be installed on the TMS320C54x DSKplus at the JP1, JP3, JP4, and JP5 locations. There is no special orientation for this operation.

C54x Adapter board

The 36-position three-row headers should be installed on the *underside* of the C54x adapter board in positions JP1, JP3, JP4, and JP5. There is no special orientation for this operation

This method provides an assembly that can be plugged directly onto the DSKplus board.

TP1 and TP2 provide monitor points for the DSK supply voltage.

TEST POINT	VOLTAGE
TP1	0 V (digital GND)
TP2	5 V

TLV1562 Interface

The TLV1562 evaluation module requires a 26-pin connector in position J1, and a 34-pin connector in position J3. The 34-pin mating cable carries the 16 data lines from the DSP to the EVM, see Figure 1 for details. ClockOut from the DSP is also available on this cable. The 26-pin cable carries the control signals such as *Frame Sync* (FS) and *Chip Select (CS*).*

TLVx544/x548 Interface

The TLVx544/x548 evaluation module requires only a 26-pin connector in position J2, see Figure 2 for details. This cable carries the serial data from the DSP to the evaluation module as well as control signals such as *Chip Select* (CS*) and *Serial Clock* (SCLK).

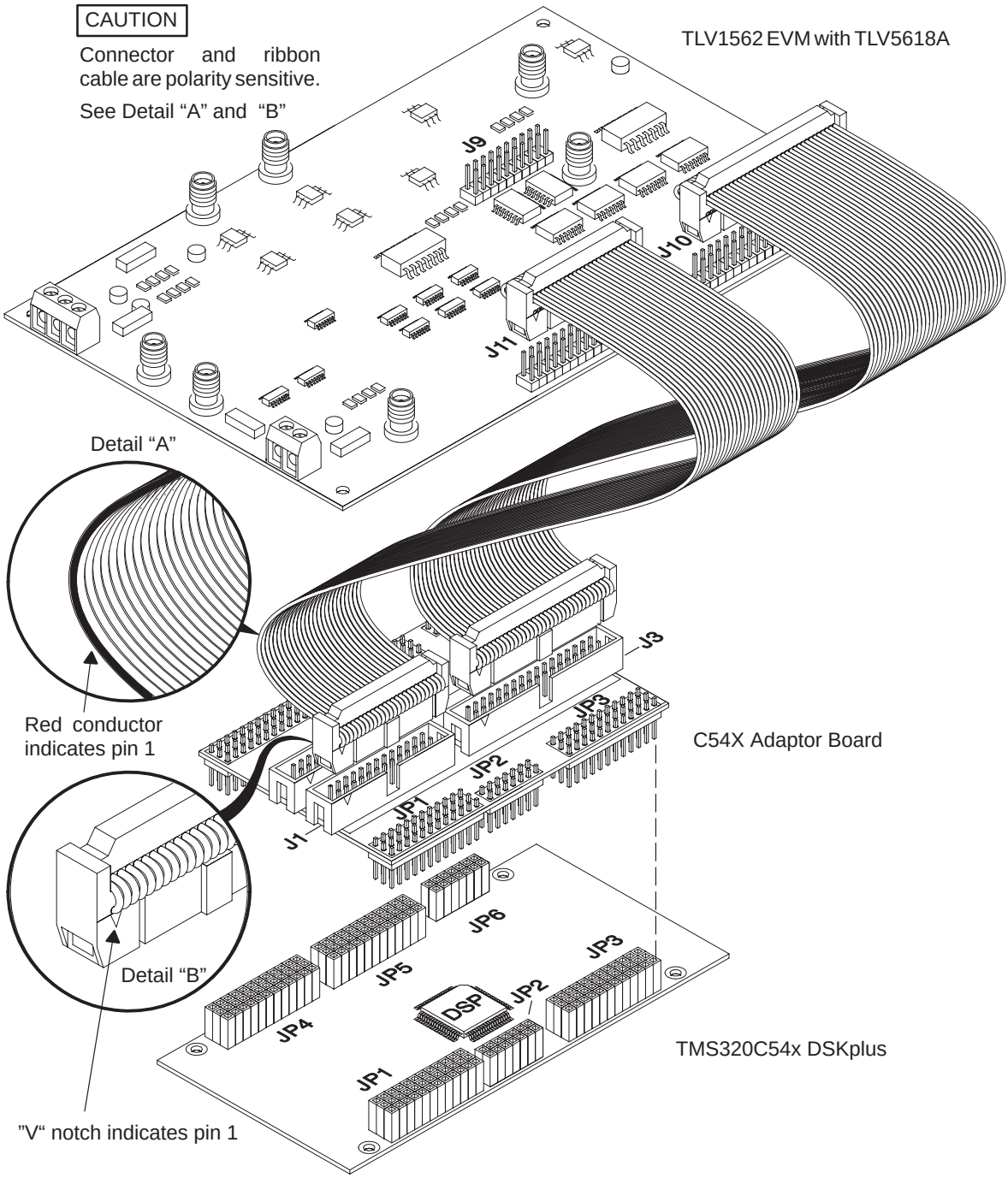

Figure 1. TLV1562 EVM

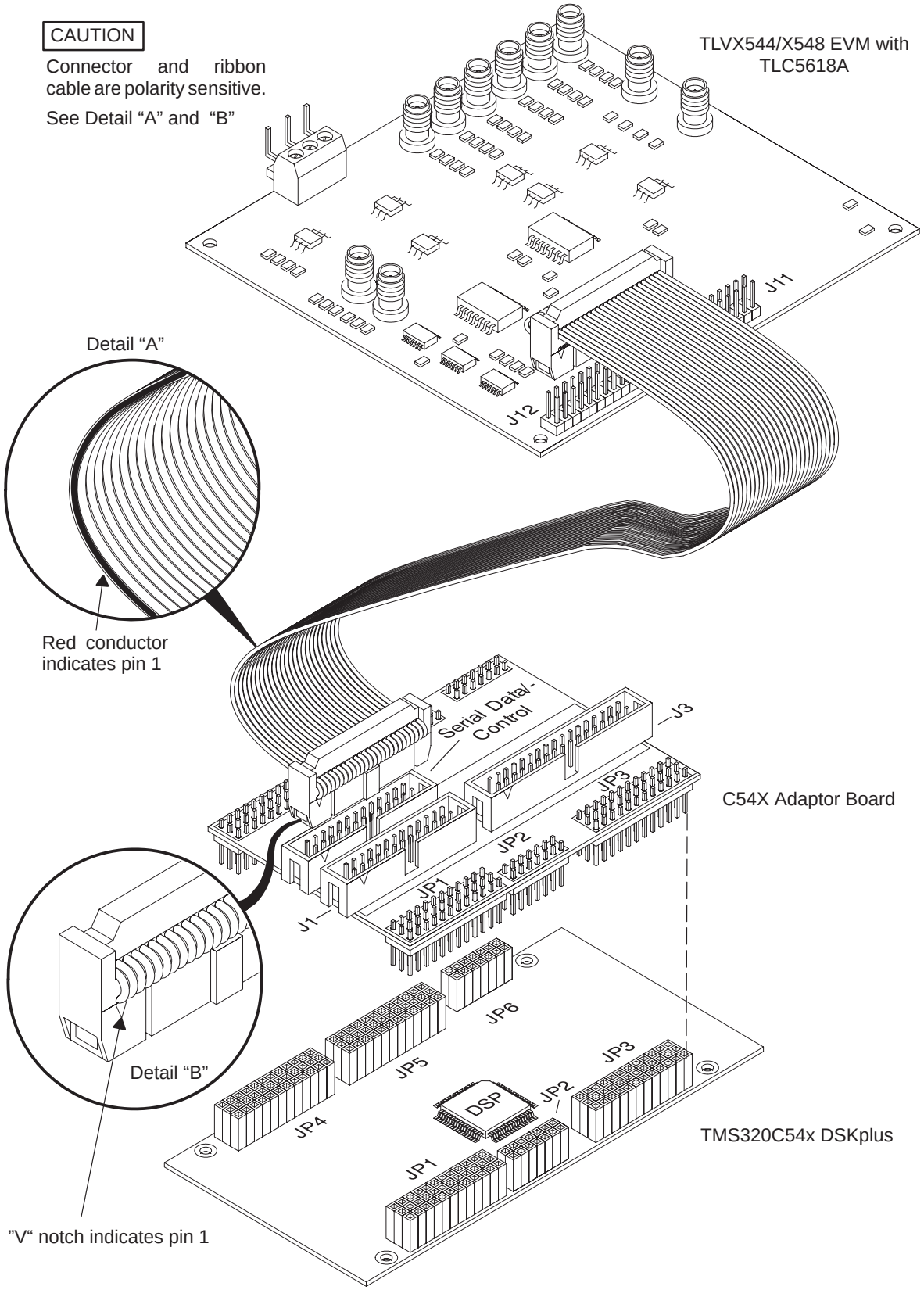

Figure 2. TLVx544/x548 EVM