

TMS320VC5505 expansion connector interface options

Assembly 512320 Revision B

Explanation of issue:

The printed circuit board footprint for the TMS320VC5505eZdsp module was improperly constructed on the 512320 Revision B assembly.

Originally the assembly was to mate with Samtec's MEC1-120-02-S-D-A connector. However, due to the footprint issue the larger non-keyed connector from Samtec must be used MEC1-130-02-S-D-NP-A. The Revision C board has been updated to use either the polarized or non-polarized version of the MEC1-130-02-S-D.

The figures below illustrate the use of the MEC1-130-02-S-D-NP-A connector with the Revision B (Figure 1) and Revision C (Figure 2) eZdsp modules.

It is recommended that the pin 1's of the connectors be aligned so that the user can correctly map the newer Revision C module when it is available.

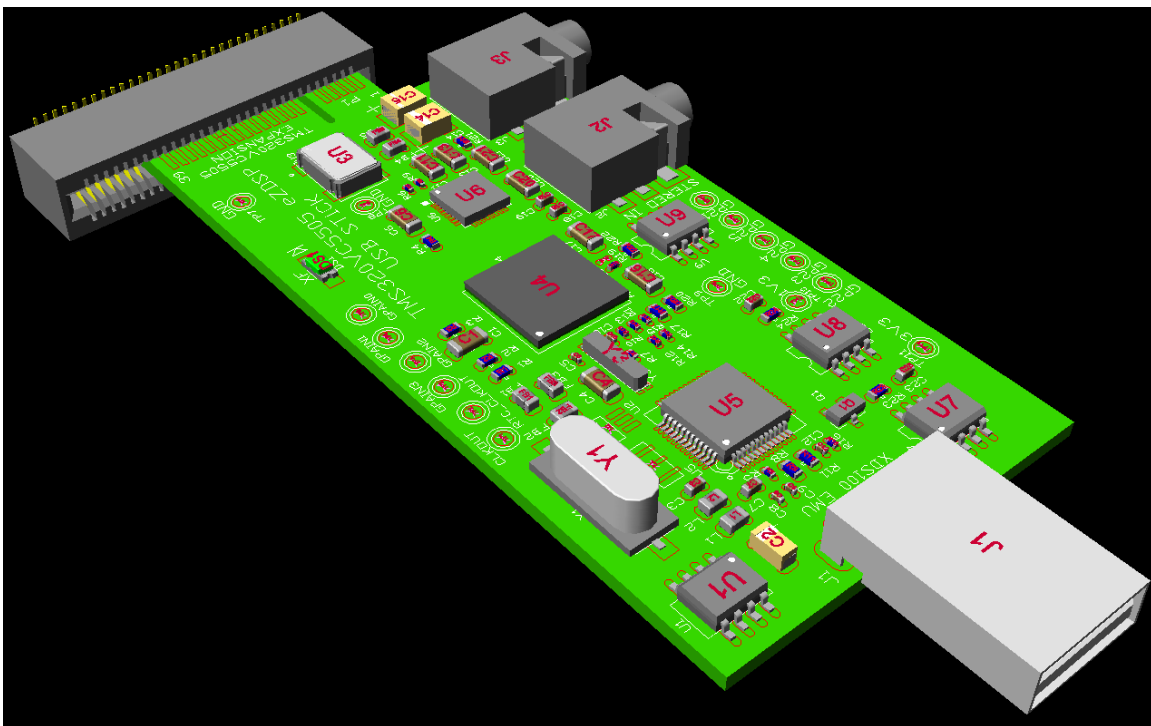


Figure 1 – TMS320VC5505 eZDSP Revision B module inserted into Samtec MEC1-130-02-S-D-NP-A.

Due to this footprint error the pins on the Revision B connector map to slightly different pins on the Target MEC1-130-02-S-D-NP-A connector. The mapping of the 60 pin target connector to the eZdsp module is shown in the table below.

eZdsp Rev B	Target Conn (60pin)		eZdsp Rev B	Target Conn (60pin)
1	1		2	2
3	3		4	4
5	5		6	6
7	7		8	8
9	9		10	10
Reserved Rev C	11		Reserved Rev C	12
Reserved Rev C	13		Reserved Rev C	14
11	15		12	16
13	17		14	18
15	19		16	20
17	21	***	18	22
19	23		20	24
21	25		22	26
23	27		24	28
25	29		26	30
27	31		28	32
29	33		30	34
31	35		32	36
33	37		34	38
35	39		36	40
37	41		38	42
39	43		40	44
Reserved Rev C	45		Reserved Rev C	46
Reserved Rev C	47		Reserved Rev C	48
Reserved Rev C	49		Reserved Rev C	50
Reserved Rev C	51		Reserved Rev C	52
Reserved Rev C	53		Reserved Rev C	54
Reserved Rev C	55		Reserved Rev C	56
Reserved Rev C	57		Reserved Rev C	58
Reserved Rev C	59		Reserved Rev C	60

Figure 3 pin mapping of Revision B ezDSP to Samtec MEC1-130-02-S-D-NP-A.
 *** pins 21 and 22 on the Target connector are reserved for Revision C future Key
 Currently this maps to Ground and future connectors will implement additional
 ground pins