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To: Mark 5 Development Group

From: Dan L. Smythe

Subject: Jumper settings for CIB and Serial Links

Jumper settings for the Correlator Interface Board (CIB) are:

P1 Jumpers:

1-2 (Xilinx M0)

3-4 (Xilinx M1)

5-6 (Xilinx M2)

J13 Jumper

3-4 (1PPS)

Jumper settings for the new TTL serial links are different from the old ECL links, and for some jumpers are the opposite, because an ECL ground is high (TRUE), whereas a TTL ground is low (FALSE).

The proper jumper settings for the NEW serial links are:

Dual Tx has no jumpers.

NEW Dual Rx operating a clock rate of 32 MHz:

P3 Jumpers:

1-2 (LINENB)

5-6 (DIV1*)

7-8 (LINENA)

NEW Single Rx operating at 32 MHz on the CIB:

P3 (FLAGSEL*)

P6 (DIV1*)

(Sometimes P6 may need to be removed for the Rx PLL to lock at 32 MHz)

P7 (LINEN)

NEW Single Rx operating at 10 MHz on the TSPM:

P3 (FLAGSEL*)

P5 (DIV0*)

P7 (LINEN)

For completeness here are the proper jumper settings for the OLD serial links. Dual Tx has no jumpers. OLD Dual Rx operating a clock rate of 32 MHz: P3 Jumpers: 1-2 (LINENB) 3-4 (DIV0) 7-8 (LINENA) 9-10 (EQEN) OLD Single Rx operating at 32 MHz on the CIB: P4 (M20SEL) P5 (DIV0) P7 (LINEN) P8 (EQEN) J6 1-2 J7 1-2 OLD Single Rx operating at 10 MHz on the TSPM: P4 (M20SEL) (P5 sometimes needed for the Rx PLL to lock at 10 MHz) P6 (DIV1) P7 (LINEN) P8 (EQEN) J6 1-2 J7 1-2 Old Single Tx operating at 32 MHz on the TSPM: P4 (M20SEL) P5 (DIV0) J7 2-3

Old Single Tx operating at 10 MHz on the CLKM:

P4 (M20SEL)

P6 (DIV1)

J7 2-3

(P5 sometimes needed for Tx PLL to lock at 10 MHz)