

Hpe[®]_moduleX2

HMx2-AS2-180

Ready for 



General Description:

The HMx2-AS2 is designed to be used in conjunction with the Hpe[®]_midi . Two ALTERA Stratix II devices are the main part of this module which can be used for the functional verification of high complex digital circuits and for SEmulation. The connection to the main board is done by two 364 pin Elastomer module connectors.

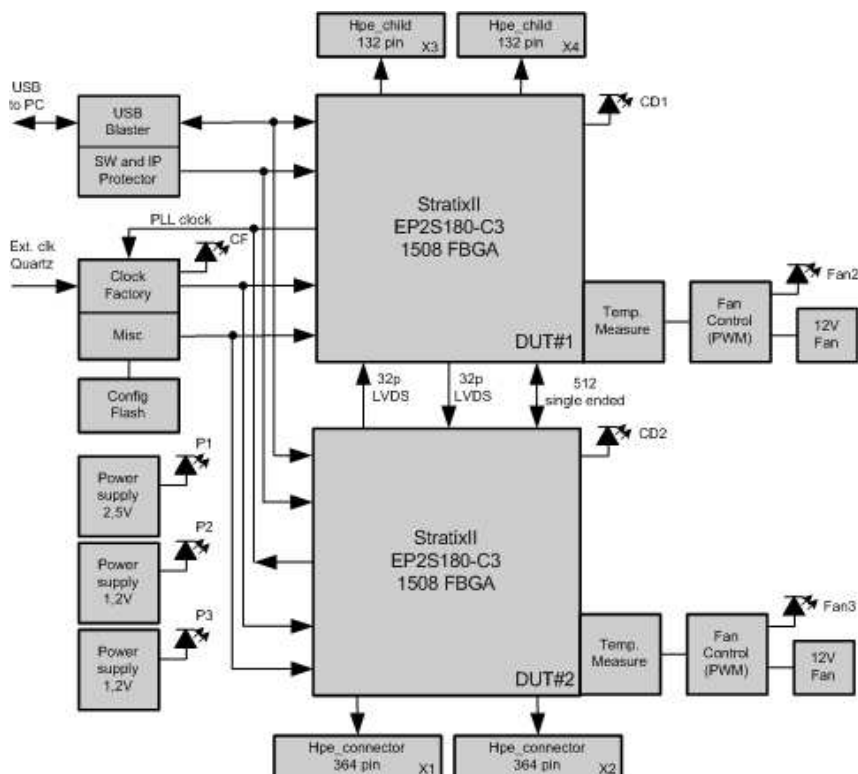
The original ALTERA USB Blaster is already on board.

Functional Description

The following features are the most important parts of this FPGA module:

- Two 1508 pin ALTERA[®] Stratix II FPGA EP2S180F1508C3N (DUT#1 and DUT#2)
- 64 LVDS pairs and 512 single ended signals connects the two FPGA together
- Interconnection designed for highest possible speed
- Two 364 pin Elastomer module connectors (X1, X2) connects the module with the Hpe[®]_midi main board.
- Two 132 pin Elastomer Hpe Child board connectors (X3, X4), one with low voltage differential signals (LVDS) and one for DDR2-SDRAMs or any other Hpe[®]_child board
- Flash for the configuration of both FPGA
- CPLD for clock distribution (clock factory), configuration and fan control (PWM)
- CPLD for FPGA Code Protection (FCP) and ALTERA USB blaster
- Advanced Encryption Standard (AES), programmed on customer request

Block Diagram



The 512 single ended wires between the 2 FPGA's are split in 16 times 32 bit busses, every bus as short as possible and every time with the same wire length. Also the two 32 LVDS pairs are usable as a bus, all pairs have the same length and the same impedance.

So we offer you the highest possible speed with the highest possible accuracy.