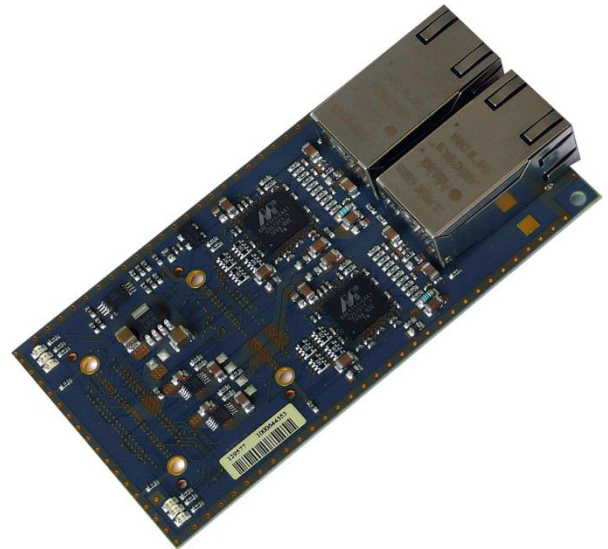


General Description:

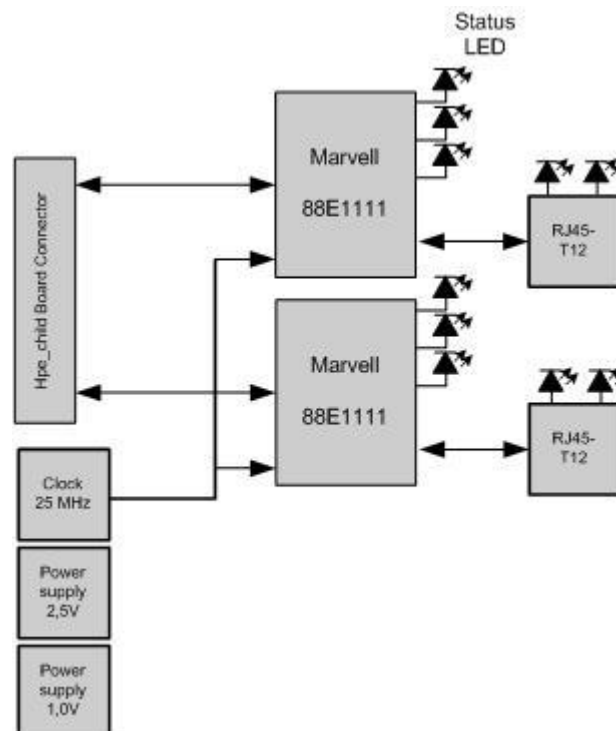
The Hpe_childboard HC-ETH2v2 offers two additional Ethernet connections for the Hpe system. Major component of each interface is the Marvell 88E1111. This chip fully features physical layer transceivers with integrated PMD sublayers to support 10BASE-T, 100BASE-TX and 1000BASE-T Ethernet protocols. The DP83865 is an ultra low power version of the DP83861 respectively the DP83891. Amongst others, it also features:

- LED support for activity, full/half duplex, link1000, link100 and link10, user programmable (manual on/off), or reduced LED mode
- IEEE 802.3u MII
- IEEE 802.3z GMII
- RGMII version 1.2a/2.0
- IEEE 802.3u Auto-Negotiation and Parallel Detection
- Fully auto negotiates between 100 Mb/s, and 10 Mb/s full duplex and half duplex devices
- Speed fallback mode to achieve quality link.
-

For more details refer to the datasheet of the 88E1111.



Block Diagram:



Pin description child board connector:

A1	ETH0_GTX_CLK	A2	ETH0_TX_CLK	B1		B2	ETH1_TX_CLK
A3	ETH1_GTX_CLK	A4	ETH0_RX_CLK	B3		B4	ETH1_RX_CLK
A5	GND	A6	GND	B5	GND	B6	GND
A7	ETH0_TX_EN	A8	ETH0_MDC	B7	ETH0_RX_ER	B8	ETH0_CONFIG2
A9	ETH0_TX_ER	A10	ETH0_MDIO	B9	ETH0_RXD0	B10	ETH0_CONFIG3
A11	ETH0_TXD0	A12	ETH0_INT#	B11	ETH0_RXD1	B12	ETH0_CONFIG4
A13	ETH0_TXD1	A14	ETH0_LED_TX	B13	ETH0_RXD2	B14	ETH0_CONFIG5
A15	ETH0_TXD2	A16	ETH0_LED_RX	B15	ETH0_RXD3	B16	ETH0_CONFIG6
A17	ETH0_TXD3	A18	ETH0_LED_DUPLEX	B17	ETH0_RXD4	B18	ETH0_RESET#
A19	ETH0_TXD4	A20	ETH0_LED_LINK1000	B19	ETH0_RXD5	B20	ETH0_LED0
A21	ETH0_TXD5	A22	ETH0_LED_LINK100	B21	ETH0_RXD6	B22	ETH0_LED1
A23	ETH0_TXD6	A24	ETH0_LED_LINK10	B23	ETH0_RXD7	B24	ETH0_LED2
A25	ETH0_TXD7	A26	ETH0_CONFIG0	B25	ETH0_COL	B26	ETH0_LED3
A27	ETH0_RX_DV	A28	ETH0_CONFIG1	B27	ETH0_CRS	B28	ETH0_LED4
A29	VCC_3V3	A30	GND	B29	VCC_VAR1	B30	GND
A31	VCC_3V3	A32	GND	B31	VCC_VAR1	B32	
A33	VCC_3V3	A34	GND	B33	VCC_VAR1	B34	
A35	VCC_3V3	A36	I2C_SCL	B35	VCC_VAR1	B36	GND
A37	VCC_3V3	A38	I2C_SDA	B37		B38	GND
A39	VCC_3V3	A40	GND	B39		B40	
A41	VCC_3V3	A42	GND	B41		B42	
A43	VCC_3V3	A44	GND	B43		B44	GND
A45	ETH1_TX_EN	A46	ETH1_MDC	B45	ETH1_RX_ER	B46	ETH1_CONFIG2
A47	ETH1_TX_ER	A48	ETH1_MDIO	B47	ETH1_RXD0	B48	ETH1_CONFIG3
A49	ETH1_TXD0	A50	ETH1_INT#	B49	ETH1_RXD1	B50	ETH1_CONFIG4
A51	ETH1_TXD1	A52	ETH1_LED_TX	B51	ETH1_RXD2	B52	ETH1_CONFIG5
A53	ETH1_TXD2	A54	ETH1_LED_RX	B53	ETH1_RXD3	B54	ETH1_CONFIG6
A55	ETH1_TXD3	A56	ETH1_LED_DUPLEX	B55	ETH1_RXD4	B56	ETH1_RESET#
A57	ETH1_TXD4	A58	ETH1_LED_LINK1000	B57	ETH1_RXD5	B58	ETH1_LED0
A59	ETH1_TXD5	A60	ETH1_LED_LINK100	B59	ETH1_RXD6	B60	ETH1_LED1
A61	ETH1_TXD6	A62	ETH1_LED_LINK10	B61	ETH1_RXD7	B62	ETH1_LED2
A63	ETH1_TXD7	A64	ETH1_CONFIG0	B63	ETH1_COL	B64	ETH1_LED3
A65	ETH1_RX_DV	A66	ETH1_CONFIG1	B65	ETH1_CRS	B66	ETH1_LED4

Remark: The pins without any name are still driven from the main board with signals, Vdd or GND. Which signal levels or types, please refer to the manual of the base board.

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