

2 Ethernet interfaces with 10/100/1000 Mbit/s

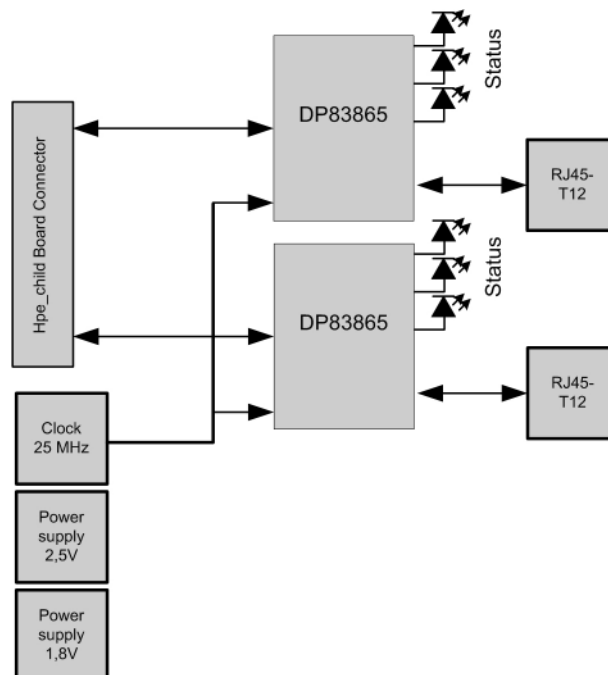
General Description:

The Hpe_childboard HC-ETH offers two additional Ethernet connections for the Hpe system. Major component of each interface is the National **DP83865**. 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 1.3
 - User programmable GMII pin ordering
 - IEEE 802.3u Auto-Negotiation and Parallel Detection
 - Fully auto negotiates between 1000 Mb/s, 100 Mb/s, and 10 Mb/s full duplex and half duplex devices
 - Speed ballback mode to achieve quality link
- For more details refer to the datasheet of the DP83865.



Block Diagram:



Pin description:

A66	ETH_RES
A50	ETH0_AN_EN
A2	ETH0_CLK_TO_MAC
A53	ETH0_COL
A55	ETH0_DUPLEX
A1	ETH0_GTX_CLK
A61	ETH0_MDC
A65	ETH0_MDINTR
A63	ETH0_MDIO
A54	ETH0_MDIX_EN
A52	ETH0_MULT_EN
A56	ETH0_PHY0
A58	ETH0_PHY1
A60	ETH0_PHY2
A62	ETH0_PHY3
A64	ETH0_PHY4
A46	ETH0_RGMII_SEL0
A48	ETH0_RGMII_SEL1
A3	ETH0_RX_CLK
A51	ETH0_RX_DV
A8	ETH0_RXD0
A10	ETH0_RXD1
A12	ETH0_RXD2
A14	ETH0_RXD3
A16	ETH0_RXD4
A18	ETH0_RXD5
A20	ETH0_RXD6
A22	ETH0_RXD7
A49	ETH0_RXER
A57	ETH0_SPEED0
A59	ETH0_SPEED1
A47	ETH0_TX_EN
A7	ETH0_TXD0
A9	ETH0_TXD1
A11	ETH0_TXD2
A13	ETH0_TXD3
A15	ETH0_TXD4
A17	ETH0_TXD5
A19	ETH0_TXD6
A21	ETH0_TXD7

B50	ETH1_AN_EN
B2	ETH1_CLK_TO_MAC
B53	ETH1_COL
B55	ETH1_DUPLEX
B1	ETH1_GTX_CLK
B61	ETH1_MDC
B65	ETH1_MDINTR
B63	ETH1_MDIO
B54	ETH1_MDIX_EN
B52	ETH1_MULT_EN
B56	ETH1_PHY0
B58	ETH1_PHY1
B60	ETH1_PHY2
B62	ETH1_PHY3
B64	ETH1_PHY4
B46	ETH1_RGMII_SEL0
B48	ETH1_RGMII_SEL1
B3	ETH1_RX_CLK
B51	ETH1_RX_DV
B8	ETH1_RXD0
B10	ETH1_RXD1
B12	ETH1_RXD2
B14	ETH1_RXD3
B16	ETH1_RXD4
B18	ETH1_RXD5
B20	ETH1_RXD6
B22	ETH1_RXD7
B49	ETH1_RXER
B57	ETH1_SPEED0
B59	ETH1_SPEED1
B47	ETH1_TX_EN
B7	ETH1_TXD0
B9	ETH1_TXD1
B11	ETH1_TXD2
B13	ETH1_TXD3
B15	ETH1_TXD4
B17	ETH1_TXD5
B19	ETH1_TXD6
B21	ETH1_TXD7

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