August 19, 2009

DP83848 MAU Enduro

Setup Instruction

Power requirements:

- The device requires 3.3V to operate. The on board regulator convert input voltage into 3.3V for the device.
- Voltage for the device can either be applied through an MII connection, or an external power supply.

MII connection: Connect directly to SmartBits or through an MII cable.

- A voltage regulator, U2, will convert 5V generates through the MII connection to 3.3V for the device.
- J7 needs to be ON when 3V3 MII supply is desired (See schematic for detail).
- External 3.3V power supply: Use J7 (pin 2 for +) with any GND pin for external power connection.

LEDs:

- Four LEDs are available: DS1 for board power, DS2 for SPEED mode, LINK and ACT/COL are on RJ45.
- Other LED options can be set by adding jumper to J5 and reference the datasheet for specific LED settings.

Address settings: Result for Phy Address per jumper settings are:

- Board is set by default PHY Address 01.
- Add jumper to J3 will set PHY Address 03.

Reference clock:

- Either an oscillator or a crystal can be used as a clock source. On this board, a crystal is used as clock input for the device.

NOTE: In RMII mode, 50 MHz oscillator is required as clock input for the device.

Table of jumpers:

Jumper Name Function

J1	MII Male Connector SmartBits interface
J2	MII Header Alternative connection for MII pins
J3	PHYAD1 Phy Address strap pin
J4	MDIX_EN To Enable/Disable MDIX mode. (Default is Auto-MDIX Enable).
J5	LED_CFG To set LEDs configuration. See datasheet.
J6	RMII Select To set RMII Mode configuration. See datasheet.
J7	MII 3V3 option To use 3V3 MII supply.
J8	PWR_DWN/INT To set Power Down and Interrupt Mode.
J9	RESET_N To reset the device.
J10	(Not populated) 25MHz_OUT 25MHz clock output
J11	(Not populated) JTAG pins JTAG interface
J12	Pulse Jack Integrated Magnetic RJ-45 connector

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