## VSC8541XMV CAUTION: This schematic is a reference for GMII MAC implentation and for enabling the internal oscillator using an external crystal. This is only meant to offer breakout and layout reference material and not meant to show all the various configuration options and operating modes. The hardware bootstrapping option signals are only shown to offer routing guidance in the layout reference files. They are not meant to be copied without referencing the datasheet to determine desired configuration. Consult the PCB layout guidelines and datasheets for information specific to desired VDD25 VDD25A\_FILT VDDMDIO VDDMDIO VDD25A FILT BLM31PG121SN COIL\_1206 C849 0.1uF C0201 C35 0.1uF C0201 C16 0.1uF C0201 Place 0.1uF 0201 decoupling caps as close as possible to IC power pins. L3 BLM31PG121SN COIL\_1206 BLADE BLADE BLADE 2 6 4 6 QTE-020-01-F-D-A C40 0.1uF C0201 C20 C21 C882 0.1uF 0.1uF 0.1uF C0201 C0201 C0201 Match lengths from xtal to IC on xtal1/2 traces R5 510 D14 LED0 GREEN LED\_1206 R400 510 D17 LED1 LED\_1206 X1 25MHz ABM3B-25.000MHZ-10-1-U-T Place 39ohm series termination as and 10k bootstrap resistor close as possible to ouput pins on IC. VDDMAC J12 RJHSE-5384 XTAL2 64 XTAL2 P0\_D3P P0\_D2N 100 ohm differentiall controlled impedance P0\_D1N P0\_D0N C1 0.1uF R1 75 RES\_0603 C5 1000pF, 3KV C1812 C0603 MDIO Connect R147 and C14 to a common pointand then connect to DGND as close as possible to IC. MDINT 75 RES\_0603 RES\_0603 JOHANSON 302S43W102KV4E C14 0.01uF/16V/X5 REF\_FILT 67 REF\_FILT FASTLINK\_FAIL REF\_REXT 1 REF\_REXT R417 2K\_1% REFCLK\_SEL\_0 REFCLK\_SEL\_1 CLK\_SQUELCH\_IN R500 39 1% RCVRD\_CLK 55 RCVRD\_CLK THERMDA CI KOUT THERMDC VSS VSC8541XMV VSC8541XMV\_Customer\_Reference\_Schematic SIZE DOCUMENT NO. Custom DATE: Friday, May 13, 2016 SH 1 OF 1