

# DM8203-E5/E6 Migration to DM8203-E8

## Application Note

CONFIDENTIAL

## Hardware Change

Application schematic designs for DM8203-E5/E6 can interchange the DM8203-E8 without any issues. The DM8203-E8 is compatible in PIN assignment (PIN-to-PIN), Register, and Functionality. The one minor modification between the DM8203-E5/E6 and the DM8203-E8 is to the bandgap resistance resistor. The only action is the replacement of the original 1.4K resistor with a 6.8K resistor. Any change to the PCB layout will not be required and no other modifications will need to be employed in migrating from the DM8203-E5/E6 to the DM8203E8.

**\*\*\*Only Difference: Bandgap Resistance Resistor will need to be 6.8K instead of 1.4K\*\*\***

## Hardware Additions

DM8203-E5/E6	DM8203-E8
None	TXC2 output 50MHz clock in Reduce MII (RMII) mode
Strap PINs: [TXD2_3=1] & [TX2_2=1] - RESERVED	Strap PINs: [TXD2_3=1] & [TX2_2=1] - Enable P0, P1 Link Fault Pass-through (LFP) Function

## Software Additions

DM8203-E5/E6	DM8203-E8
None	93C56 & 93C66 support
None	93C46 or 93C56/66 auto detection
EEPROM Word 0 – (Signature) - RESERVED for 93C46	EEPROM Word 0 – (Signature) - For Detection of 93C46 or 93C56
Memory BIST Status - Reg52H.[7] Reg54H.[7] Reg62H.[4]	Memory BIST Status - Reg54H.[1] Reg54H.[0]
None	Reg0AH.[6] (EEPROM 93C46 or 93C56 Type Select)

None	Reg0BH.[6] (EEPROM 93C46 or 93C56 Type Status)
None	Reg3BH (Port 2 MAC Control Register)
None	Reg3CH (PHY Control Register)
None	Reg42H (Soft-strap function)
None	Reg63H (Per Port Forward Control Register 1)
None	Reg64H (Per Port Forward Control Register 2)
None	Reg6CH (Per Port Priority & VLAN Control Register)
None	Reg80H.[6] (MIB Counter Disable)

### **Application Note Revision History**

**Date of Revision:**  
December 8, 2010

**Revision Number:**  
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**Reason:**  
Originally Published  
Application Note