

DM9161A / DM9161B Migration to DM9161C

Application Note



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Hardware Change

Designs for DM9161A or DM9161B based on application schematics provided by Davicom can interchange DM9161C without any issues. The DM9161C is schematically compatible in designs including the DM9161A or the DM9161B. Reference circuit differences can be observed through the attached diagrams of DM9161A, DM9161B, and DM9161C with the effected areas highlighted by boxes.

	DM9161AEP	DM9161BEP	DM9161CEP
Host I/F	MII/RMII	MII/RMII	MII/RMII
HP Auto-MDix	YES	YES	YES
Technology	Analog PHY	DSP PHY	DSP PHY
Process	0.25um	0.18um	0.18um
Out put Voltage	2.5V	1.8V	1.8V
Product ID	B8A0	B8B0	B8B1
Industrial Temperature Support	No	Yes (P/N: DM9161BIEP)	Under Development
Lead Free	YES	YES	YES
Halogen Free	YES	YES	YES
Package	48 pin LQFP	48 pin LQFP	48 pin LQFP 32 pin QFN (P/N: DM9161CNP)
Other Hardware Note	None	Speed LED Issue	None



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Software Change

DM9161C PHY ID in the register was changed from the PHY ID of DM9161A and DM9161B. In cases where different or unique software is employed, please be aware to check if the PHY ID is applied in your software. If the PHY ID is utilized, then the ID will need to be changed in accordance with the appropriate PHY Register.

	PHY ID Identifier Register #2 (PHYID2) - 03
DM9161AEP	B8A0
DM9161BEP	B8B0
DM9161CEP	B8B1

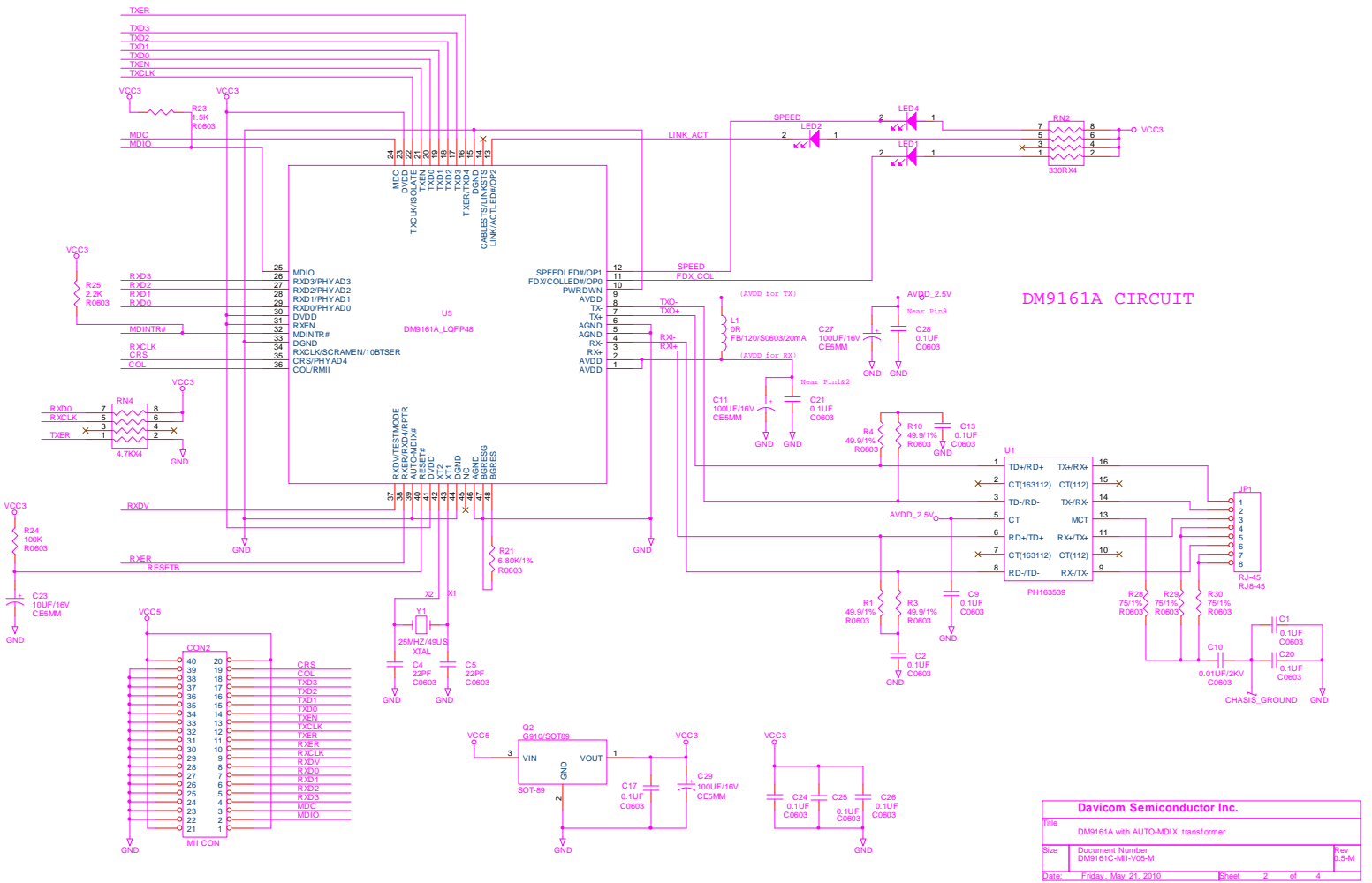
*** **ONLY** applicable if modification was made to Register: 1BH in DM9161BEP***

	Register:1BH
Other Software Note	DM9161C does not require any kind of modification to Register: 1BH



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Reference Circuit: (DM9161A Circuit)



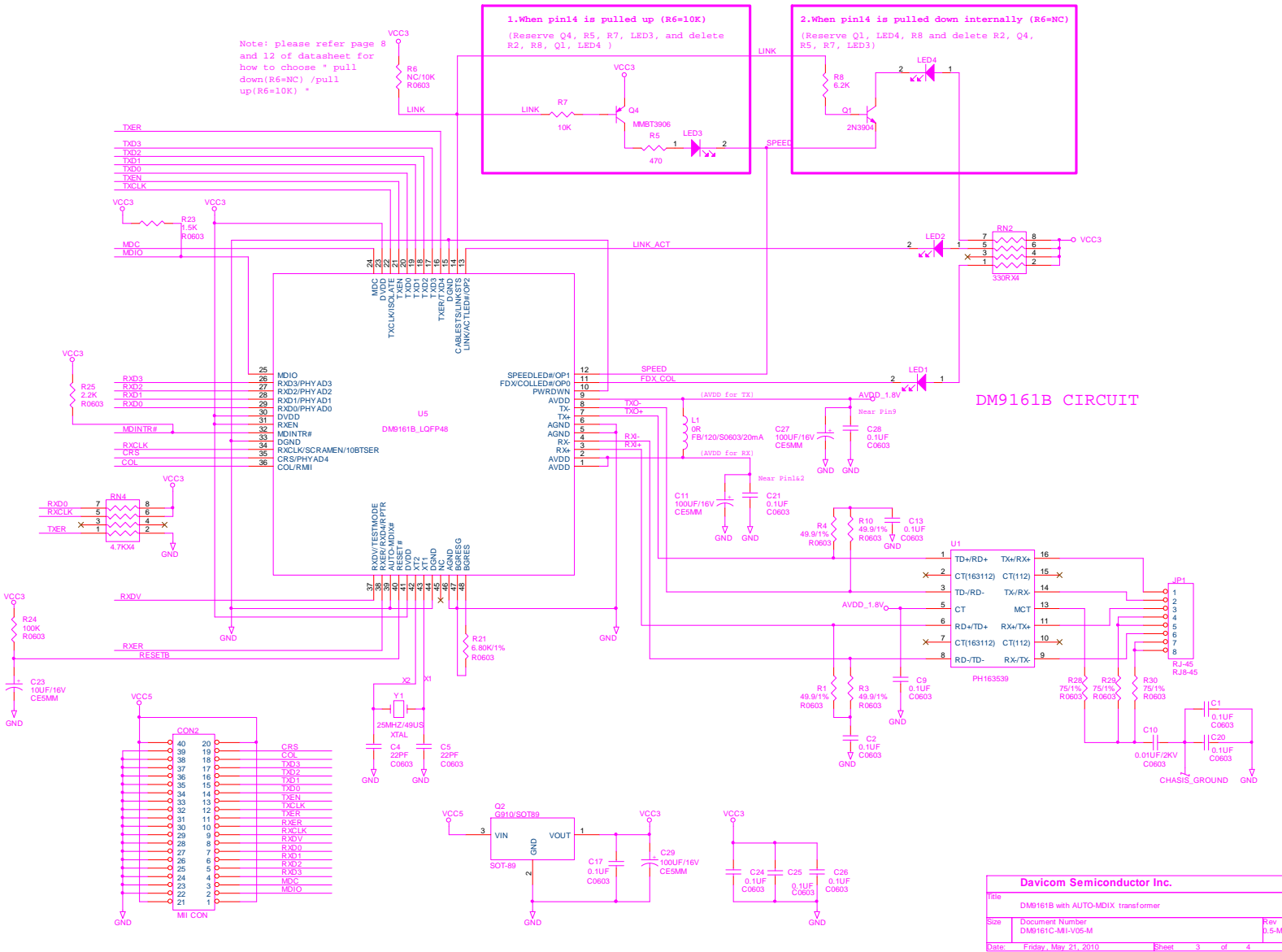
DM9161A CIRCUIT

Davicom Semiconductor Inc.		
Title	DM9161A with AUTO-MDIX transformer	
Size	Document Number DM9161C-MI-V05-M	Rev. D5-M
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Reference Circuit: (DM9161B Circuit)





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Reference Circuit: (DM9161C Circuit)

