



DM9161B Initial code

Application Note



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● Reason

To enhance DM9161B 10M TX waveform compliant with IEEE802.3 and 10M/100M RX performance in sensitivity.

● Countermeasure

When using DM9161B, we recommend adding as follows initial code in the driver.

```
//PHY_REG 27 (1Bh) <- 0000h  
phy_write(db, 27, 0x0000);  
//PHY_REG 27 (1Bh) <- AA00h  
phy_write(db, 27, 0xaa00);  
  
//PHY_REG 27 (1Bh) <- 0017h  
phy_write(db, 27, 0x0017);  
//PHY_REG 27 (1Bh) <- AA17h  
phy_write(db, 27, 0xaa17);  
  
//PHY_REG 27 (1Bh) <- 002Fh  
phy_write(db, 27, 0x002f);  
//PHY_REG 27 (1Bh) <- AA2Fh  
phy_write(db, 27, 0xaa2f);  
  
//PHY_REG 27 (1Bh) <- 0037h  
phy_write(db, 27, 0x0037);  
//PHY_REG 27 (1Bh) <- AA37h  
phy_write(db, 27, 0xaa37);  
  
//PHY_REG 27 (1Bh) <- 0040h  
phy_write(db, 27, 0x0040);  
//PHY_REG 27 (1Bh) <- AA40h  
phy_write(db, 27, 0xaa40);
```



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```
//PHY_REG 27 (1Bh) <- 0050h
phy_write(db, 27, 0x0050);
//PHY_REG 27 (1Bh) <- AA50h
phy_write(db, 27, 0xaa50);

//PHY_REG 27 (1Bh) <- 006Bh
phy_write(db, 27, 0x006b);
//PHY_REG 27 (1Bh) <- AA6Bh
phy_write(db, 27, 0xaa6b);

//PHY_REG 27 (1Bh) <- 007Dh
phy_write(db, 27, 0x007d);
//PHY_REG 27 (1Bh) <- AA7Dh
phy_write(db, 27, 0xaa7d);

//PHY_REG 27 (1Bh) <- 008Dh
phy_write(db, 27, 0x008d);
//PHY_REG 27 (1Bh) <- AA8Dh
phy_write(db, 27, 0xaa8d);

//PHY_REG 27 (1Bh) <- 009Ch
phy_write(db, 27, 0x009c);
//PHY_REG 27 (1Bh) <- AA9Ch
phy_write(db, 27, 0xaa9c);

//PHY_REG 27 (1Bh) <- 00A3h
phy_write(db, 27, 0x00a3);
//PHY_REG 27 (1Bh) <- AAA3h
phy_write(db, 27, 0xaa3);

//PHY_REG 27 (1Bh) <- 00B1h
phy_write(db, 27, 0x00b1);
//PHY_REG 27 (1Bh) <- AAB1h
phy_write(db, 27, 0xaab1);
```



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```
//PHY_REG 27 (1Bh) <- 00C0h
phy_write(db, 27, 0x00c0);
//PHY_REG 27 (1Bh) <- AAC0h
phy_write(db, 27, 0xaac0);

//PHY_REG 27 (1Bh) <- 00D2h
phy_write(db, 27, 0x00d2);
//PHY_REG 27 (1Bh) <- AAD2h
phy_write(db, 27, 0xaad2);

//PHY_REG 27 (1Bh) <- 00E0h
phy_write(db, 27, 0x00e0);
//PHY_REG 27 (1Bh) <- AAE0h
phy_write(db, 27, 0xaae0);
//PHY_REG 27 (1Bh) <- 0000h
phy_write(db, 27, 0x0000);

//PHY_REG 27 (1Bh) <- E100h
phy_write(db, 27, 0xE100);
```