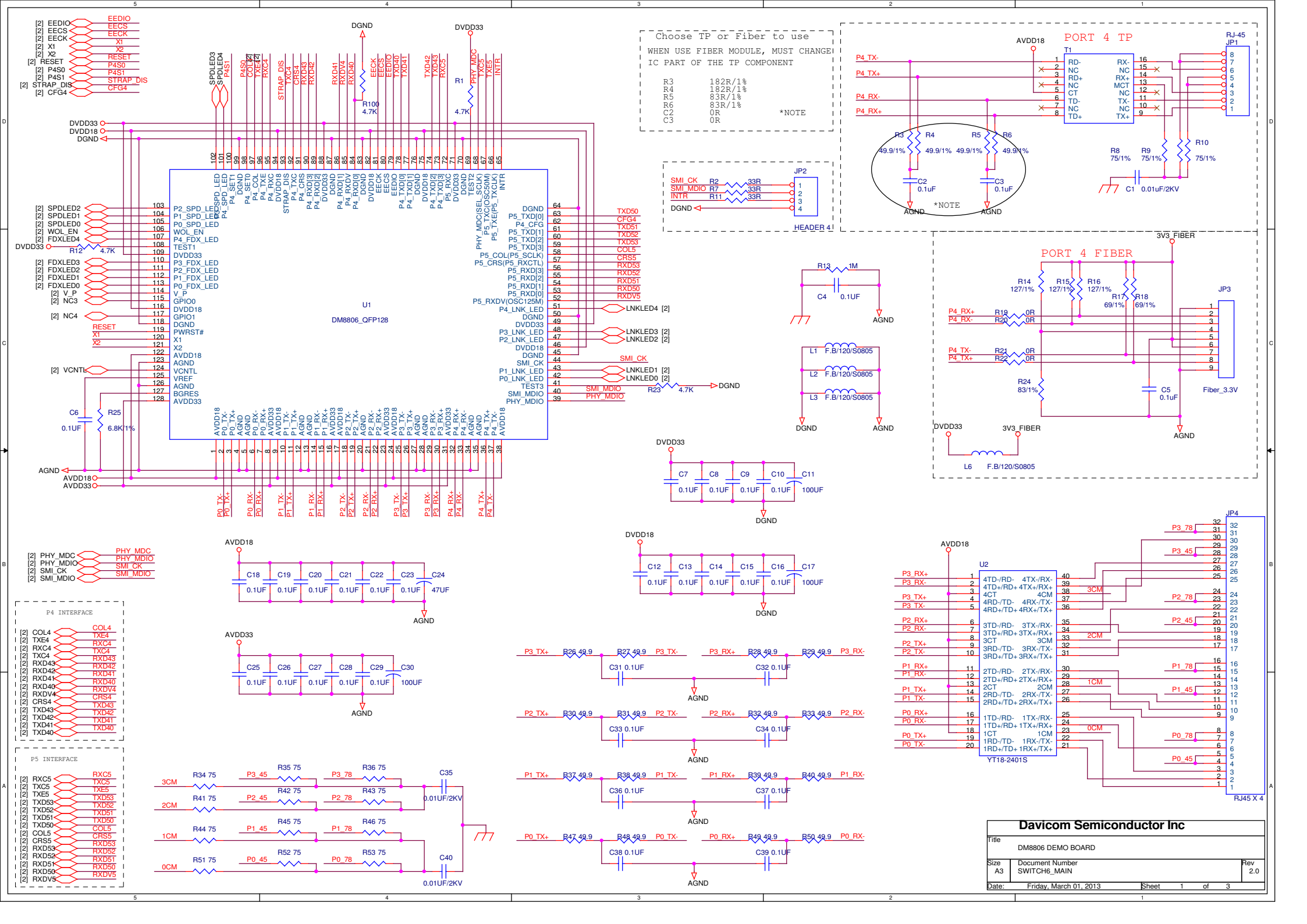
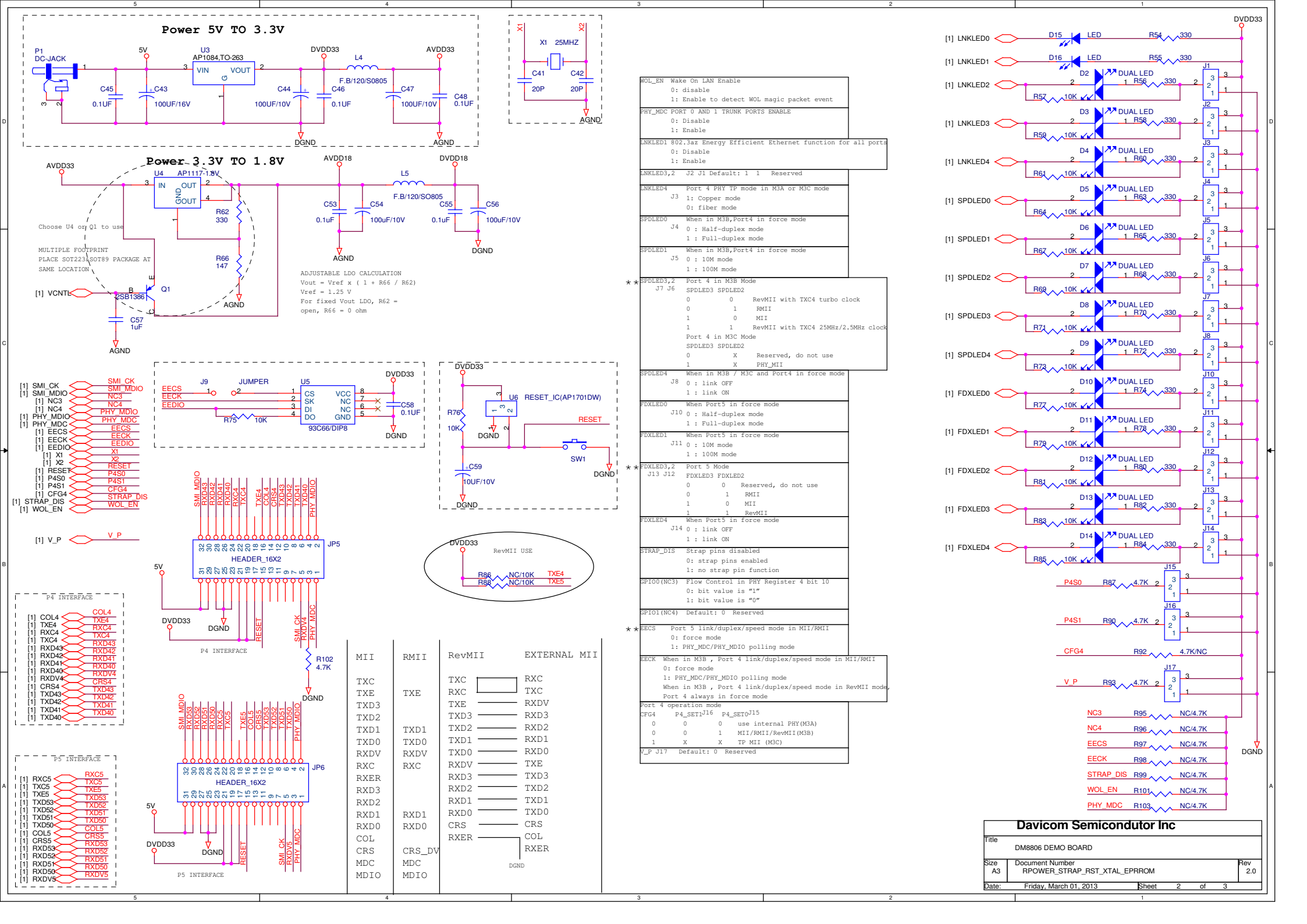

Choose TP or Fiber to use
WHEN USE FIBER MODULE, MUST CHANGE
IC PART OF THE TP COMPONENT
R3 182R/1%
R4 182R/1%
R5 83R/1%
R6 83R/1%
C2 0R *NOTE
C3 0R
PORT 4 TP
PORT 4 FIBER
U1
DM8806_QFP128
YT18-2401S
RJ45 X 4
HEADER 4
P4 INTERFACE
P5 INTERFACE
Davicom Semiconductor Inc
DM8806 DEMO BOARD
SWITCH6_MAIN
Friday, March 01, 2013


Power 5V TO 3.3V
P1
DC-JACK
5V
U3
AP1084,TO-263
VIN
VOUT
DVDD33
L4
F.B/120/S0805
AVDD33
C45
0.1UF
C43
100UF/16V
C44
100UF/10V
C46
0.1UF
C47
100UF/10V
C48
0.1UF
DGND
AGND
X1
X2
X1 25MHZ
C41
20P
C42
20P
Power 3.3V TO 1.8V
AVDD33
U4
AP1117-1.8V
IN
OUT
GND
R62
330
R66
147
Choose U4 or Q1 to use
MULTIPLE FOOTPRINT
PLACE SOT223/SOT89 PACKAGE AT
SAME LOCATION
[1] VCNTL
Q1
2SB1386
C57
1uF
AVDD18
DVDD18
L5
F.B/120/SO805
C53
0.1uF
C54
100uF/10V
C55
0.1uF
C56
100uF/10V
ADJUSTABLE LDO CALCULATION
Vout = Vref x (1 + R66 / R62)
Vref = 1.25 V
For fixed Vout LDO, R62 =
open, R66 = 0 ohm
[1] SMI_CK
[1] SMI_MDIO
[1] NC3
[1] NC4
[1] PHY_MDIO
[1] PHY_MDC
[1] EECS
[1] EECK
[1] EEDIO
[1] X1
[1] X2
[1] RESET
[1] P4S0
[1] P4S1
[1] CFG4
[1] STRAP_DIS
[1] WOL_EN
[1] V_P
J9
JUMPER
U5
CS
SK
DI
DO
VCC
NC
GND
93C66/DIP8
R75
10K
C58
0.1UF
U6
RESET_IC(AP1701DW)
R76
10K
C59
10UF/10V
SW1
RESET
RevMII USE
R86
NC/10K
R88
NC/10K
TXE4
TXE5
JP5
JP6
HEADER_16X2
R102
4.7K
P4 INTERFACE
P5 INTERFACE
MII
RMII
RevMII
EXTERNAL MII
TXC
TXE
TXD3
TXD2
TXD1
TXD0
RXDV
RXC
RXER
RXD3
RXD2
RXD1
RXD0
CRS
COL
CRS_DV
MDC
MDIO
WOL_EN Wake On LAN Enable
0: disable
1: Enable to detect WOL magic packet event
PHY_MDC PORT 0 AND 1 TRUNK PORTS ENABLE
0: Disable
1: Enable
LNKLED1 802.3az Energy Efficient Ethernet function for all ports
0: Disable
1: Enable
LNKLED3,2 J2 J1 Default: 1 1 Reserved
LNKLED4 J3 Port 4 PHY TP mode in M3A or M3C mode
1: Copper mode
0: fiber mode
SPDLED0 J4 When in M3B,Port4 in force mode
0 : Half-duplex mode
1 : Full-duplex mode
SPDLED1 J5 When in M3B,Port4 in force mode
0 : 10M mode
1 : 100M mode
** SPDLED3,2 J7 J6 Port 4 in M3B Mode
SPDLED3 SPDLED2
0 0 RevMII with TXC4 turbo clock
0 1 RMII
1 0 MII
1 1 RevMII with TXC4 25MHz/2.5MHz clock
Port 4 in M3C Mode
SPDLED3 SPDLED2
0 X Reserved, do not use
1 X PHY_MII
SPDLED4 J8 When in M3B / M3C and Port4 in force mode
0 : link OFF
1 : link ON
FDXLED0 J10 When Port5 in force mode
0 : Half-duplex mode
1 : Full-duplex mode
FDXLED1 J11 When Port5 in force mode
0 : 10M mode
1 : 100M mode
** FDXLED3,2 J13 J12 Port 5 Mode
FDXLED3 FDXLED2
0 0 Reserved, do not use
0 1 RMII
1 0 MII
1 1 RevMII
FDXLED4 J14 When Port5 in force mode
0 : link OFF
1 : link ON
STRAP_DIS Strap pins disabled
0: strap pins enabled
1: no strap pin function
GPIO0(NC3) Flow Control in PHY Register 4 bit 10
0: bit value is "1"
1: bit value is "0"
GPIO1(NC4) Default: 0 Reserved
** EECS Port 5 link/duplex/speed mode in MII/RMII
0: force mode
1: PHY_MDC/PHY_MDIO polling mode
EECK When in M3B , Port 4 link/duplex/speed mode in MII/RMII
0: force mode
1: PHY_MDC/PHY_MDIO polling mode
When in M3B , Port 4 link/duplex/speed mode in RevMII mode,
Port 4 always in force mode
Port 4 operation mode
CFG4 P4_SET1 J16 P4_SET0 J15
0 0 0 use internal PHY(M3A)
0 0 1 MII/RMII/RevMII(M3B)
1 X X TP MII (M3C)
V_P J17 Default: 0 Reserved
[1] LNKLED0
[1] LNKLED1
[1] LNKLED2
[1] LNKLED3
[1] LNKLED4
[1] SPDLED0
[1] SPDLED1
[1] SPDLED2
[1] SPDLED3
[1] SPDLED4
[1] FDXLED0
[1] FDXLED1
[1] FDXLED2
[1] FDXLED3
[1] FDXLED4
D15
D16
LED
R54
R55
D2
D3
D4
D5
D6
D7
D8
D9
D10
D11
D12
D13
D14
DUAL LED
R56
R57
R58
R59
R60
R61
R63
R64
R65
R66
R68
R69
R70
R71
R72
R73
R74
R77
R78
R79
R80
R81
R82
R83
R84
R85
10K
330
J1
J2
J3
J4
J5
J6
J7
J8
J10
J11
J12
J13
J14
P4S0
P4S1
CFG4
V_P
R87
R90
R92
R93
4.7K
4.7K/NC
J15
J16
J17
NC3
NC4
EECS
EECK
STRAP_DIS
WOL_EN
PHY_MDC
R95
R96
R97
R98
R99
R101
R103
NC/4.7K
DVDD33
DGND
Davicom Semicondutor Inc
Title
DM8806 DEMO BOARD
Size
A3
Document Number
RPOWER_STRAP_RST_XTAL_EPRROM
Rev
2.0
Date:
Friday, March 01, 2013
Sheet
2
of
3

VER	DATE	ENGINEER	NOTE
1.0	11/16/2010	MARCO FAN	NEW CIRCUIT
2.0	01/31/2011	MARCO FAN	Modify: 1. RXD0 Connect 4.7K to DGND 2. Dual LED add 10K fix Dual LED bug 3.IC pin define error , pin98 & pin100 Exchange
2.0	03/01/2013	WILLIE NIOU	RENAME FOR DM8806 CIRCUIT

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Title: DM8806 DEMO BOARD		
Size: A4	Document Number: HISTORY	Rev: 2.0
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