NOTES, UNLESS OTHERWISE SPECIFIED:

1. RESISTANCE VALUES IN OHMS.
2. CAPACITANCE VALUES IN MICROFARADS.
3. REFERENCE DESIGNATORS USED:
4. ALL 0.1 µF AND 0.01µF CAPACITORS ARE DECOUPLING CAPS UNLESS OTHERWISE NOTED. THEY ARE SHOWN ON THE PAGE WITH THE INTEGRATED CIRCUITS THEY SHOULD BE PLACED NEAR.
5. NHET1xx means NHET1_[xx].
6. OBSERVE THE LAYOUT NOTES IN SCHEMATIC.

SCHEMATIC CONTENTS

01 TITLE SHEET
02 MCU ADC
03 MCU EMIF
04 MCU SPI
05 MCU ETM
06 MCU DCAN, FLEXRAY, and LIN
07 MCU JTAG and OSC
08 MCU NHET
09 MCU GPIO
10 MCU Power & GND
11 FETSwitches for 1st USB
12 EMIF Addr/ETM/RTP
13 SDRAM
14 Sensors, LEDs, and Pushbutton
15 FET Switches for 2nd USB
16 USB 1st OHCI Host
17 USB device and 2nd OHCI Host
18 FET Switch for RMII and DIP Switch
19 Ethernet PHY & Connector
20 CAN Transceivers
21 JTAG and MIPI ETM Connector
22 DMM and RTP Mictor Connectors
23 XD100V2 FTDI2232
24 XDS100V2 CPLD
25 RESET
26 Power Supply
27 Power Inut
28 EXP P1 and EXP P2
29 EXP P3
changed all the names to Gladiator only
When using RMII, the OSC will be 50MHz

To MCU TO PHY

place R225, R226, R132, and C29 close to U1
Light Sensor
Digikay No: TS1-1005-1-ND

So no amplifier is needed

At 25 degree, R254 = 100k, at 80 degree, R254 is around 1/10*100K = 10K

CD is the Right-Bottom Leg (top view)
U18 and U16 footprints are overlapped
In MII mode (RX_DV=0): TXD3=1, No use
In RMII mode (RX_DV=1): TXD3=0, RMII slave, 50MHz input to X1
JTAG_SELn = HIGH --> XDS100

JTAG_SELn = LOW --> ARM

JTAG and MIPI
Foot Print Only

Foot Print Only

AMP 2-5767004-2
Receptacle, Center Strip Contacts

Foot Print Only
This is JTAG PD power. We pull PD to VCC_3V3.
If VCC_3.3V below 3.0V --> RESET

SENSE THRESHOLD FOR TPS3808G09 IS 0.840 VOLTS

This is the RESET pin rather than TRST

If VCC_3.3V below 3.0V --> RESET

If VCC_1.5V below 1.35V --> RESET
Vout = (1+R1/R2) * 1.204

For Vout=1.2V, R291 shorted, and R293 Open
For Vout=1.5, R291=23.2Kohms, and R293=95.3Kohms

R281: ERJ-2RKF2322X

V Reference is 1.25
Vout = 1.25*(1+R2x/R1x)