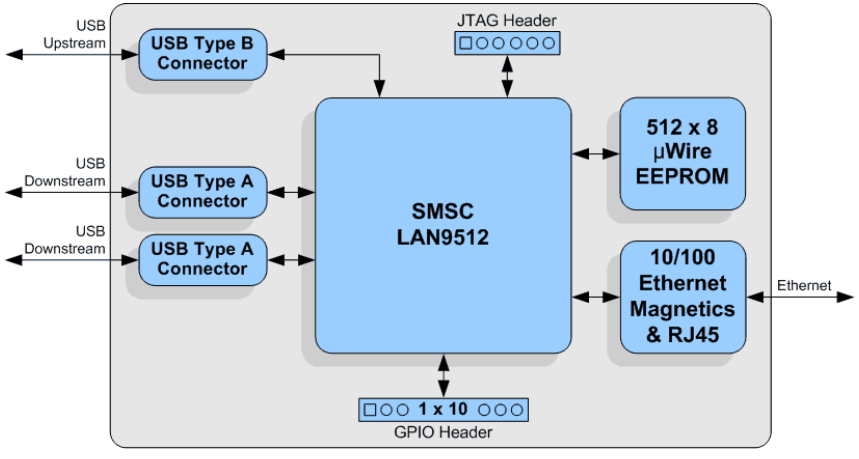
LAN9512 64QFN Customer Evaluation Board

PCB Revision A

Schematic Revision 1.1

Design Details

Board: Assembly No. 6577
Chip: 64 Pin QFN
Board Form Factor: 4" X 2.5"



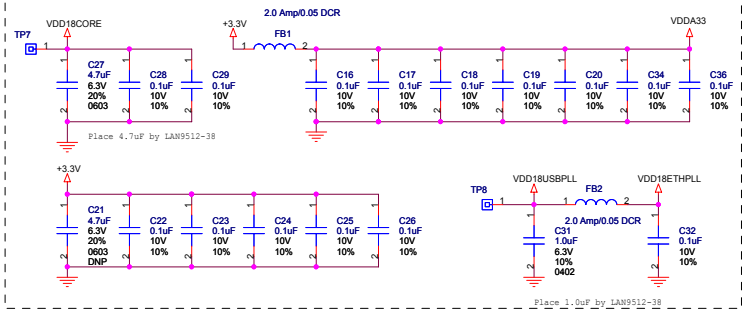
Circuit Diagrams utilizing SMSC Products Are Included As A Means Of Illustrating Typical Semiconductor Applications: Consequently Complete Information Sufficient For Construction Purposes Is Not Necessarily Given. The Information Has Been Carefully Checked And Is Believed To Be Entirely Reliable. However, No Responsibility Is Assumed For Inaccuracies. Furthermore, Such Information Does Not Convey To The Purchaser Of The Semiconductor Devices Described Any License Under The Patent Rights Of SMSC Or Others. SMSC Reserves The Right To Make Changes At Any Time In Order To Improve Design And Supply The Best Product Possible.

ITEM	Page
Title Page	1
EMI/ESDand Ethernet	2
LAN9512 and Power	3

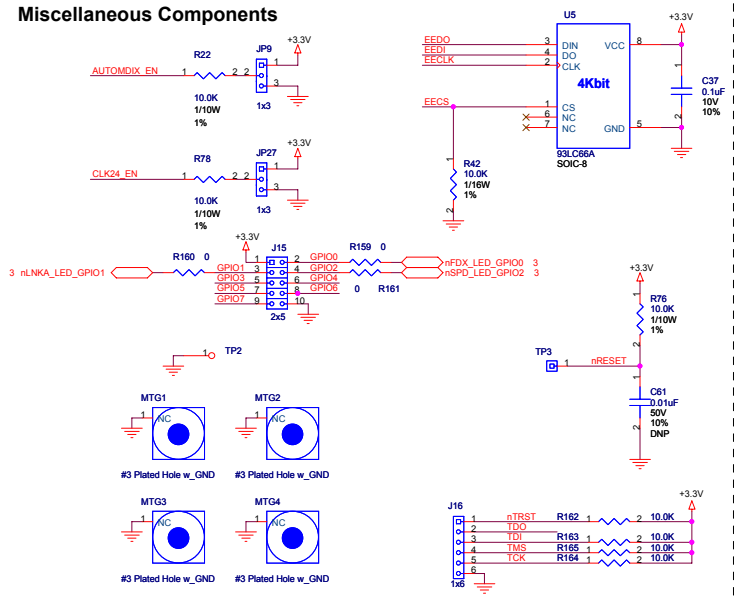
SMSC SUCCESS BY DESIGN

Title				
LAN9512 2-Port USB 2.0 to Ethernet Hub				
Size: C	Engineer: R.W.	Assembly No.: 6577	PCB Rev: A	Schematic Rev: 1.1
Date: Wednesday, January 06, 2010			Sheet 1 of 3	

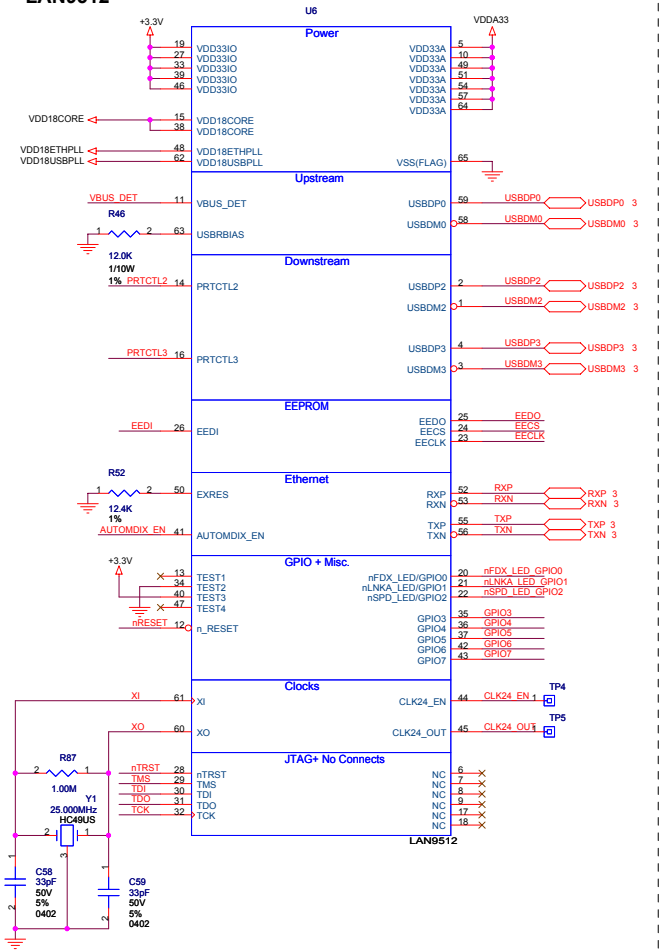
Power Supply Filtering LAN9512



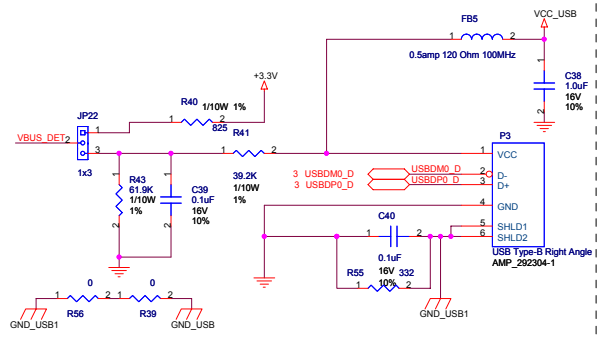
Miscellaneous Components



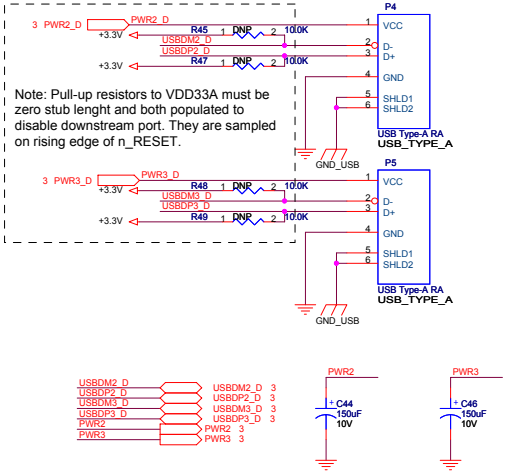
LAN9512



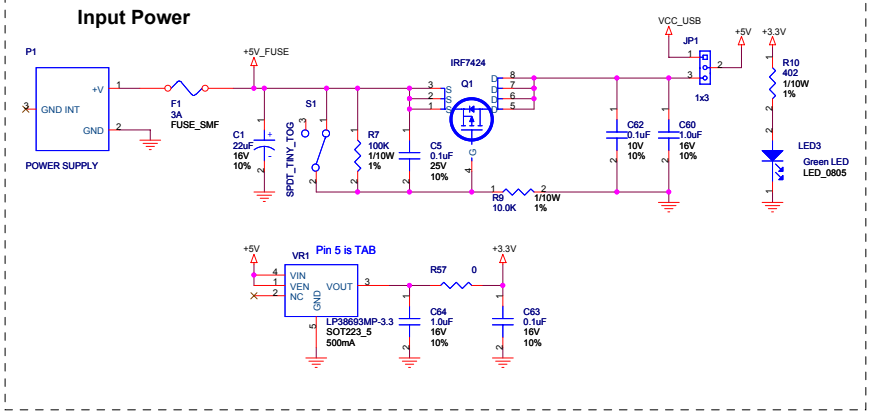
Upstream



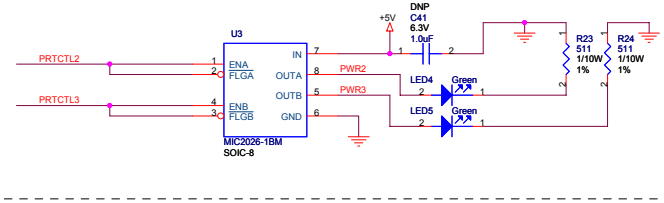
Downstream



Input Power

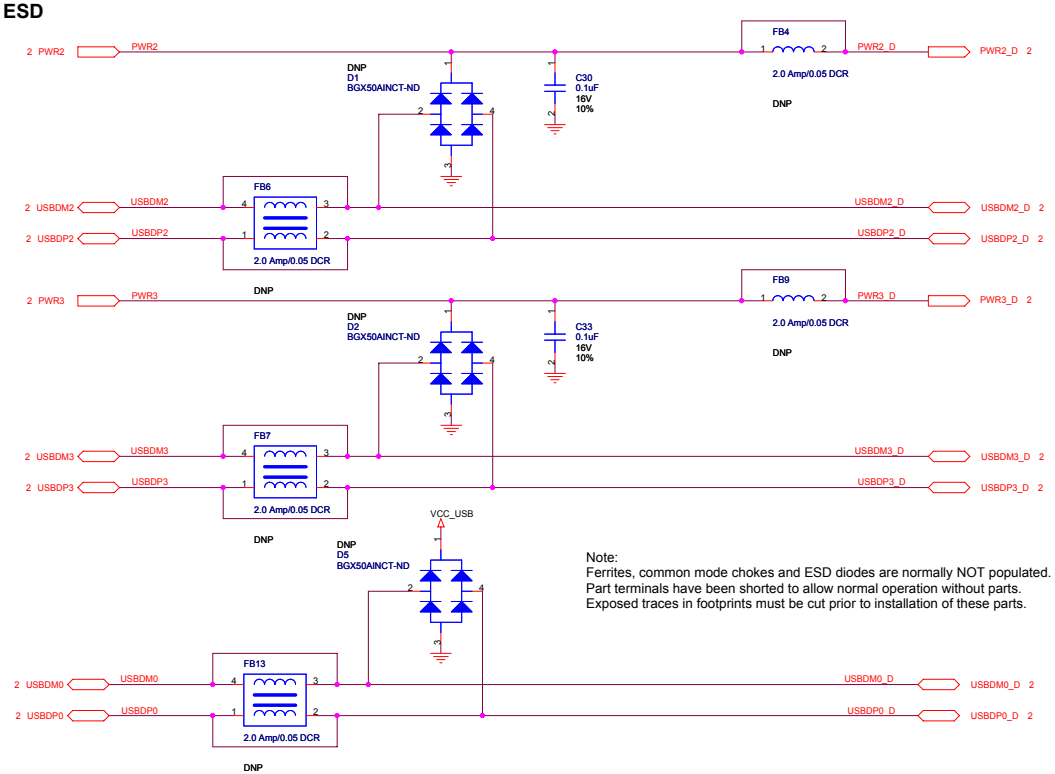


Power Switching Downstream



Title: LAN9512 64QFN				
Size: C	Engineer: R.W.	Assembly No.: 6577	PCB Rev: A	Schematic Rev: 1.1
Date: Wednesday, January 06, 2010			Sheet 2 of 3	

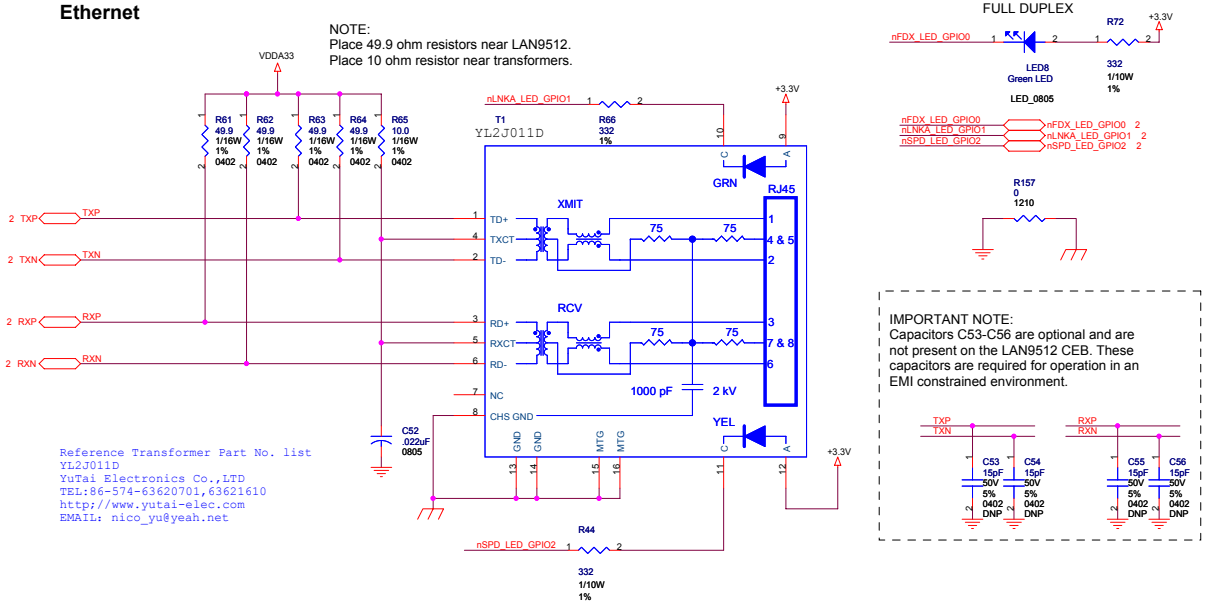
EMI and ESD



Note:
Ferrites, common mode chokes and ESD diodes are normally NOT populated.
Part terminals have been shorted to allow normal operation without parts.
Exposed traces in footprints must be cut prior to installation of these parts.

Ethernet

NOTE:
Place 49.9 ohm resistors near LAN9512.
Place 10 ohm resistor near transformers.



Reference Transformer Part No. list
YL2J011D
YuTai Electronics Co.,LTD
TEL:86-574-63620701,63621610
http://www.yutai-elec.com
EMAIL: nico_yu@yeah.net

FULL DUPLEX

IMPORTANT NOTE:
Capacitors C53-C56 are optional and are not present on the LAN9512 CEB. These capacitors are required for operation in an EMI constrained environment.

SMSC SUCCESS BY DESIGN

Title				
Power and Ethernet				
Size	Engineer	Assembly No.	PCB Rev	Schematic Rev
C	R.W.	6577	A	1.1
Date:	Wednesday, January 06, 2010		Sheet	3 of 3