

LAN89218 Mini Development Card

Assy 6519

PCB Revision A

Schematic Revision 1.1

Design Details

Board:
Assy 6519

Chip:
SMSC LAN89218

Board Form Factor:
Larger than 2.346" x 2.300"

Assembly:
100-Pin TQFP

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.

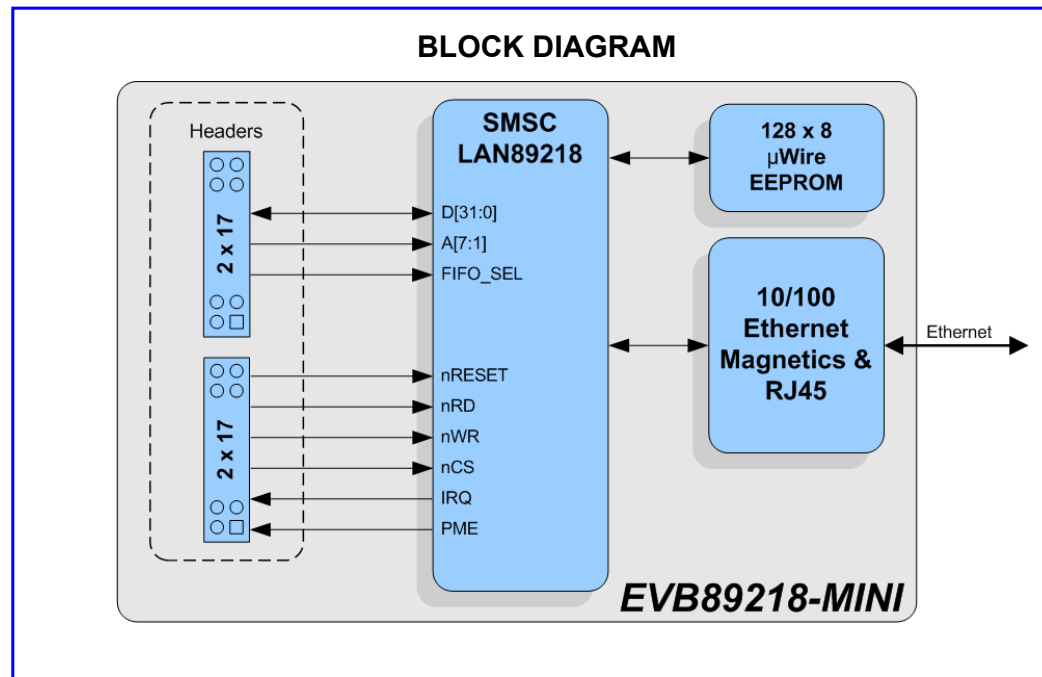
Important Note: Some support components shown in this design example may not be Automotive-Grade. Please be sure to check the manufacturer's datasheet(s) for detailed specifications and corresponding part numbers.


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LAN89218	3

Revision History

Rev 1.0 to 1.1:

- All Pages: Added note for non-Automotive-Grade support components.
- Page 2: Added note for default ADDR1 configuration.
- Page 2: Added note for EEPROM CS pull-down resistor.

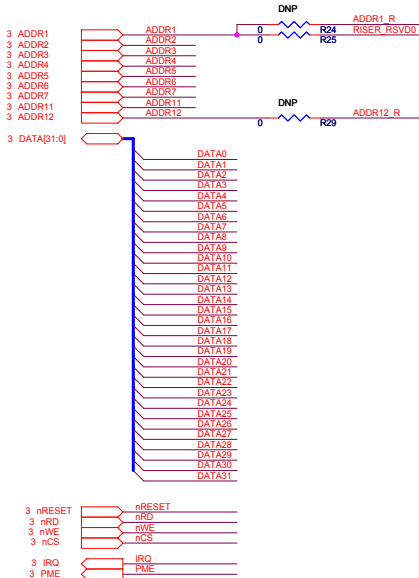


 SMSC <small>SUCCESS BY DESIGN</small>				
Title LAN89218 Customer Evaluation Board				
Size	Engineer	Assembly No.	PCB Rev	Schematic Rev
C	R. W.	6519	A	1.1
Date: Friday, December 17, 2010			Sheet	1 of 3

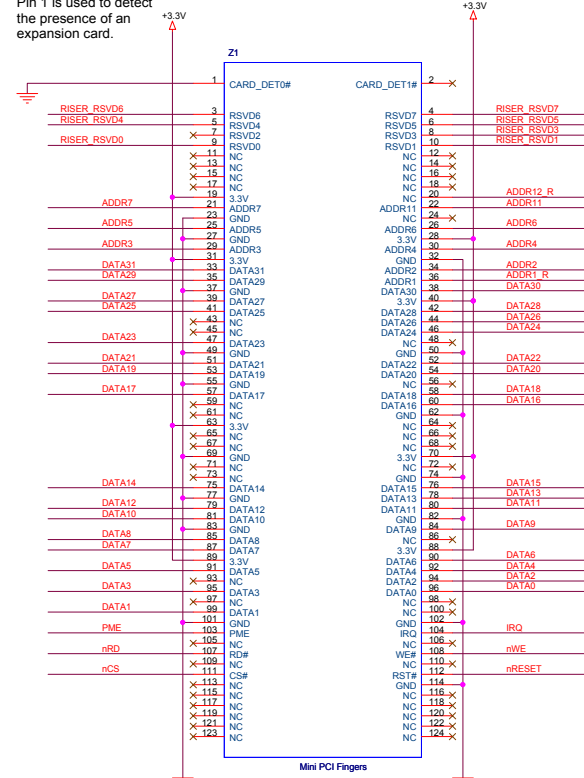
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Local Bus Expansion Slot

NOTE:
 ADDR1 is connected to RISER_RSVD0
 (Pin 9 on Z1) by default.
 Remove R25 and populate R24 to connect
 ADDR1 to ADDR1_R (Pin 36 on Z1)



NOTE:
 Pin 1 is used to detect
 the presence of an
 expansion card.



Local Bus Test Points



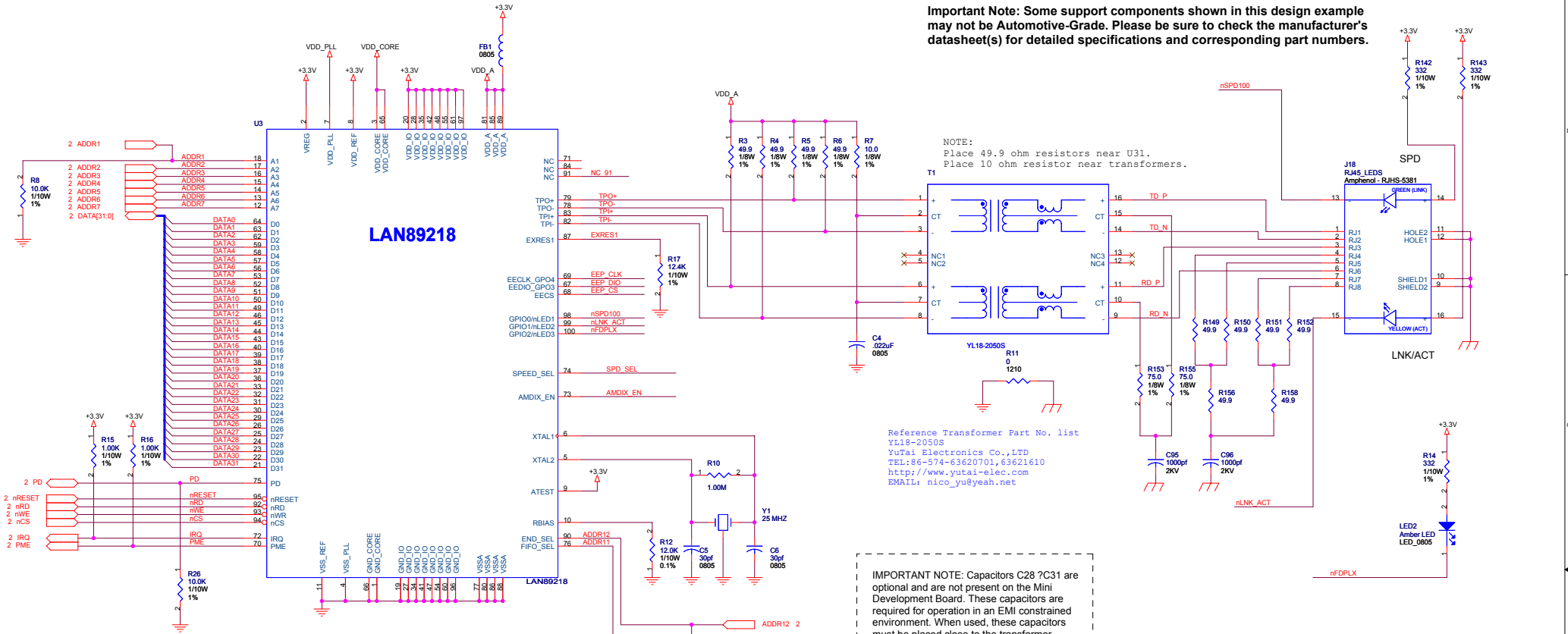
smc
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Title: **Expansion Slot Edge Fingers**

Size	Engineer	Assembly No.	PCB Rev	Schematic Rev
C	R. W.	6519	A	1.1

Date: Friday, December 17, 2010 Sheet 2 of 3

Important Note: Some support components shown in this design example may not be Automotive-Grade. Please be sure to check the manufacturer's datasheet(s) for detailed specifications and corresponding part numbers.



NOTE:
Place 49.9 ohm resistors near U31.
Place 10 ohm resistor near transformers.

Reference Transformer Part No. list
YL18-2050S
Yutai Electronics Co.,LTD
TEL:86-574-63620701,63621610
http://www.yutai-elec.com
EMAIL: nico_yu@yeah.net

IMPORTANT NOTE: Capacitors C28 ?C31 are optional and are not present on the Mini Development Board. These capacitors are required for operation in an EMI constrained environment. When used, these capacitors must be placed close to the transformer.

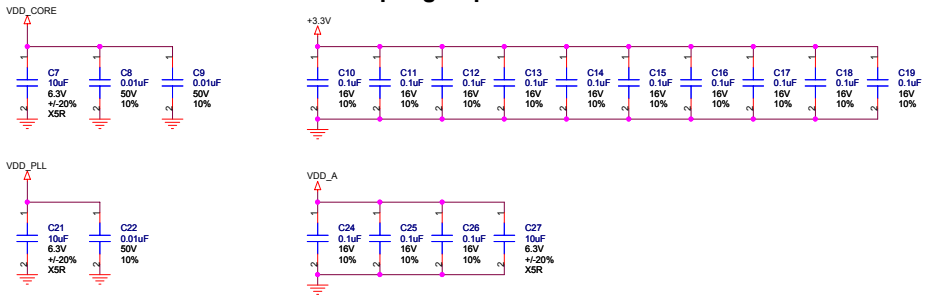
NOTE:
R154 for SMSC use only.

Data Mode	R13	R28
32 Bit Mode	Stuff	DNP
16 Bit Mode	DNP	Stuff

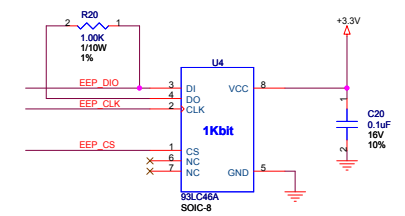
Table A: Device Configuration Straps

NOTE:
Stuff JP1 for Auto-MDIX Enabled
DNP JP1 for Auto-MDIX Disabled

Decoupling Capacitors



MAC EEPROM (Optional)



NOTE:
A pull-down resistor on the EEPROM's chip select (CS) signal is recommended by many EEPROM manufacturers. Please refer to the EEPROM manufacturer's data sheet for further information.

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Title: **LAN89218**

Size	Engineer	Assembly No.	PCB Rev	Schematic Rev
C	R.W.	6519	A	1.1
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