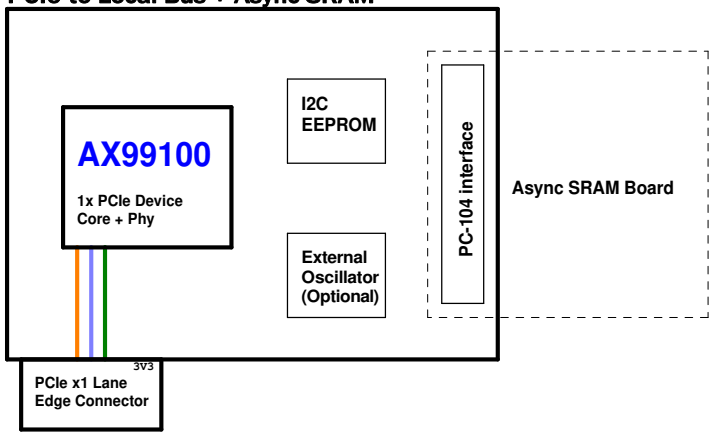
AX99100 PCIe to Local Bus Demo Board Schematic

PCIe to Local Bus + Async SRAM



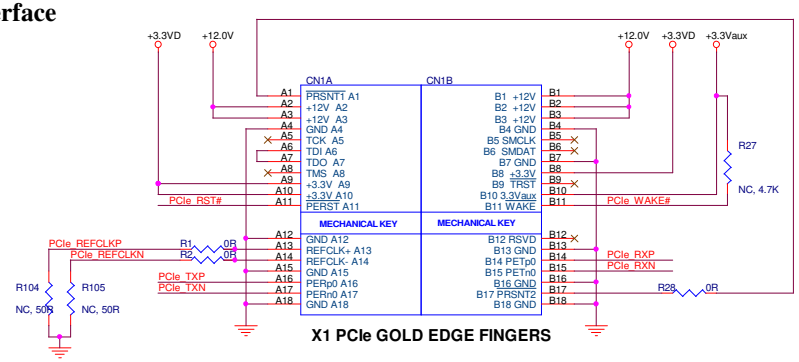
Note:
1.Please refer to AX99100_LOCALBUS_ASYNC_SRAM_MODULE_REFERENCE_SCHEMATIC
for Async SRAM Module Board schematic.

2.Please deliver us your AX99100 schematic and PCB layout file for further review.

ASIX ELECTRONICS CORPORATION

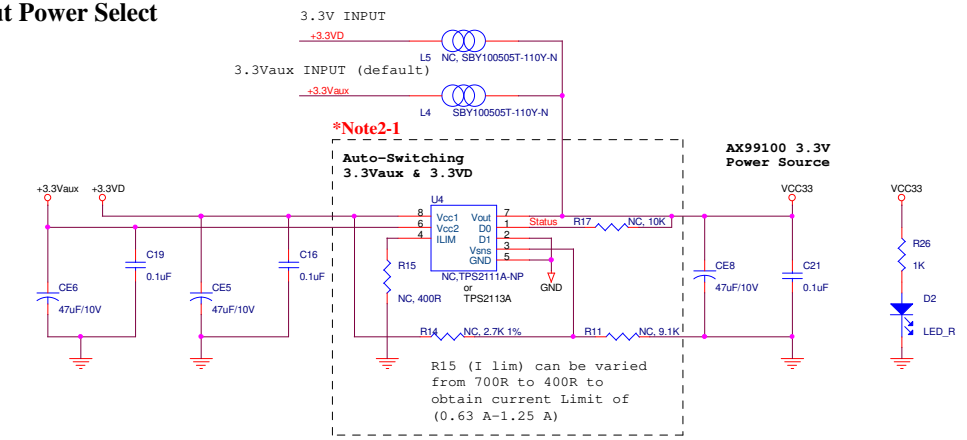
Title: System Block		
Size: Custom	Document Number: AX99100 Local Bus Demo Board	Rev: 1.02
Date: Thursday, November 12, 2020	Sheet 1 of 4	

PCIe Interface

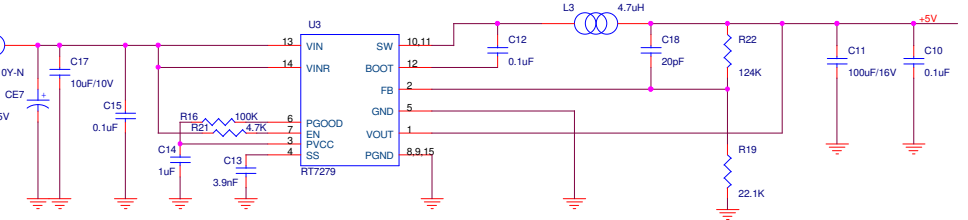


X1 PCIe GOLD EDGE FINGERS

3.3V Input Power Select



12V to 5V (optional for 5V local bus devices) *Note2-2



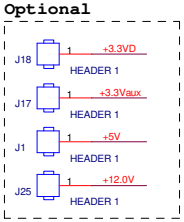
PCIe INTERFACE

PCIe_TXP	PCIe_TXP	3
PCIe_TXN	PCIe_TXN	3
PCIe_RXP	PCIe_RXP	3
PCIe_RXN	PCIe_RXN	3
PCIe_REFCLKP	PCIe_REFCLKP	3
PCIe_REFCLKN	PCIe_REFCLKN	3
PCIe_WAKE#	PCIe_WAKE#	3
PCIe_RST#	PCIe_RST#	3

POWER

VCC33	VCC33	3
+3.3Vaux	+3.3Vaux	3
+5V	+5V	3
+12.0V	+12.0V	3
GND	GND	3

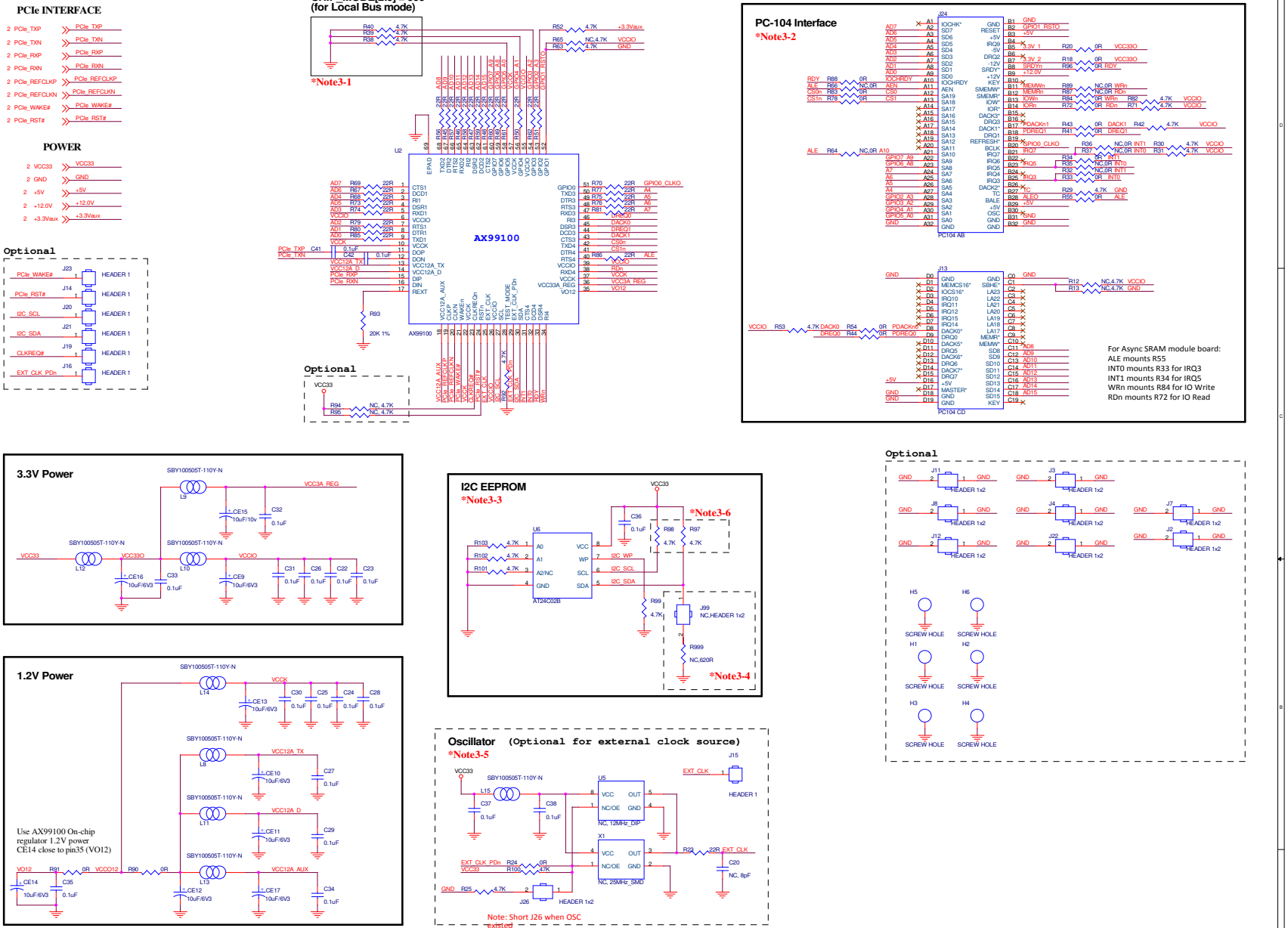
Optional



***Note2-1:**
The default power circuit provides AX99100 3.3V power source from PCIe 3.3Vaux directly. You can implement the Auto-switching power circuit to auto-switching the 3.3Vaux and 3.3VD power supply sources if necessary.

***Note2-2:**
The 12V to 5V regulator circuit is optional to provide 5V power source for the connected 5V local bus devices.

ASIX ELECTRONICS CORPORATION		
Title: PCIe Interface/Power		
Size: Custom	Document Number: AX99100 Local Bus Demo Board	Rev: 1.02
Date: Thursday, November 12, 2020	Sheet 2 of 4	



***Note3-1:**
Please pull down all CHIP_MODE[2:0] pins for local bus mode.

***Note3-2:**
Please adjust the PC-104 connector circuits based on the exact connected local bus devices.

***Note3-3:**
The default EEPROM contents of AX99100 Local Bus demo board are for async SRAM module board. Please contact ASIX support (support@asix.com.tw) to get correct EEPROM contents for your specific AX99100 local bus applications. IMPORTANT!! To program wrong EEPROM contents might cause your AX99100 board cannot work normally.

***Note3-4:**
Please reserve the SDA pull down circuit location on your PCB board in order to disable auto-loading EEPROM while the EEPROM contents are wrong.

***Note3-5:**
When external Oscillator existed, the EXT_CLK_PDn pin should be pull down by external resistor (i.e. short J26). Otherwise, please pull-up by external resistor to indicate NO external Oscillator existed.

***Note3-6:**
Please still pull-up SCL and SDA to 3.3v with 4.7k ohm if the EERPOM is empty.

Revision History

Revision	Date	Comment
V1.00	2016/03/18	Initial release.
V1.01	2016/04/22	1.Mount R104 and R105 with 50 Ohm resistors in page 2.
V1.02	2020/11/12	1.Added Noted 3-6 in Page 3. 2.Removed PCIe_REFCLK of resistors and capacitors.

ASIX ELECTRONICS CORPORATION		
Title: Revision History		
Size: A	Document Number: AX99100 Local Bus Demo Board	Rev: 1.02
Date: Thursday, November 12, 2020	Sheet 4 of 4	