

AX99100 PCIe to Local Bus Demo Board Schematic

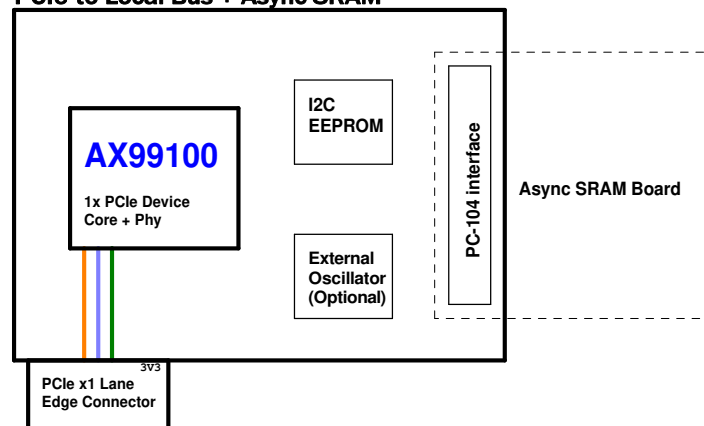
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PC-104 Interface

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PCIe to Local Bus + Async SRAM



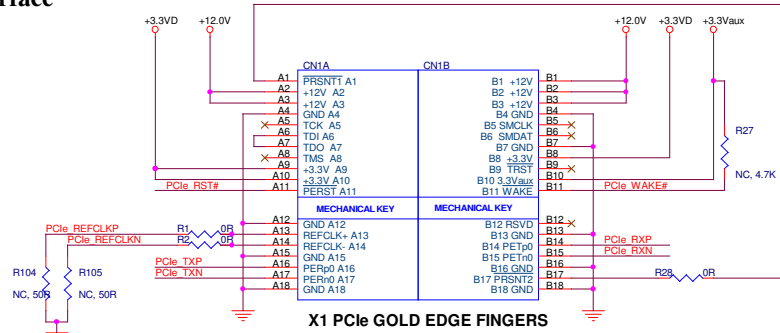
Note:

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

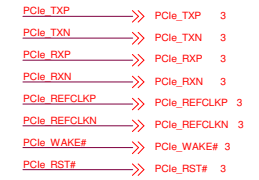
2. Please deliver us your AX99100 schematic and PCB layout file for further review.

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

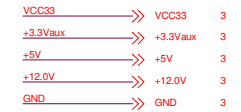
PCIe Interface



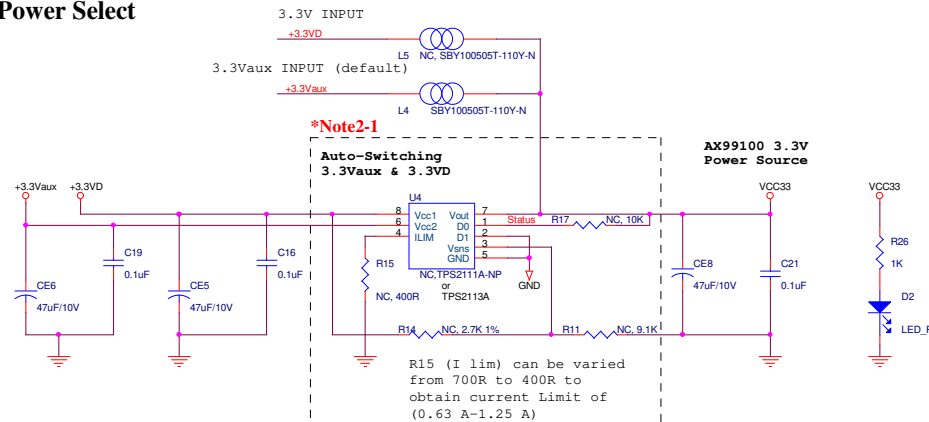
PCIe INTERFACE



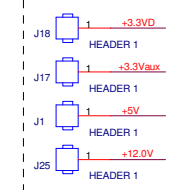
POWER



3.3V Input Power Select



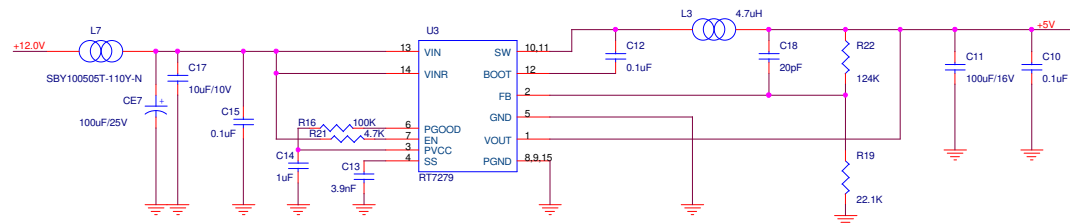
Optional



***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.

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



2	PCle_TXP	PCle_TXP
	PCle_TXN	PCle_TXN
2	PCle_RXP	PCle_RXP
	PCle_RXN	PCle_RXN
2	PCle_REFCLKP	PCle_REFCLKP
	PCle_REFCLKN	PCle_REFCLKN
2	PCle_WAKE#	PCle_WAKE#
2	PCle_RST#	PCle_RST#

2	VCC33	>>	VCC33
2	GND	>>	GND
2	+5V	>>	+5V
2	+12.0V	>>	+12.0V
2	+3.3Vaux	>>	+3.3Vaux

The diagram shows the JTAG interface connections for the module. It consists of six rows, each representing a different signal line connected to a specific header:


- PCle WAKE#** is connected to **J23** and labeled **HEADER 1**.
- PCle RST#** is connected to **J14** and labeled **HEADER 1**.
- I2C_SCL** is connected to **J20** and labeled **HEADER 1**.
- I2C_SDA** is connected to **J21** and labeled **HEADER 1**.
- CLKREQ#** is connected to **J19** and labeled **HEADER 1**.
- EXT_CLK_P0n** is connected to **J16** and labeled **HEADER 1**.

The diagram shows the AX99100 microcontroller with various pins connected to power, ground, and signal lines. Key components include:

- Power Supply:** VCC12A (pin 18) and VCC12B (pin 19) are connected to a 12V supply through 4.7k resistors. VCC12A is also connected to a 10k 1% resistor to ground. VCC12B is connected to a 10k 1% resistor to ground.
- Grounding:** GND pins (1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100) are connected to ground.
- Signal Lines:** Various pins are connected to signal lines, including VCC12A, VCC12B, VCC12C, VCC12D, VCC12E, VCC12F, VCC12G, VCC12H, VCC12I, VCC12J, VCC12K, VCC12L, VCC12M, VCC12N, VCC12O, VCC12P, VCC12Q, VCC12R, VCC12S, VCC12T, VCC12U, VCC12V, VCC12W, VCC12X, VCC12Y, VCC12Z, VCC12AA, VCC12AB, VCC12AC, VCC12AD, VCC12AE, VCC12AF, VCC12AG, VCC12AH, VCC12AI, VCC12AJ, VCC12AK, VCC12AL, VCC12AM, VCC12AN, VCC12AO, VCC12AP, VCC12AQ, VCC12AR, VCC12AS, VCC12AT, VCC12AU, VCC12AV, VCC12AW, VCC12AX, VCC12AY, VCC12AZ, VCC12BA, VCC12BB, VCC12BC, VCC12BD, VCC12BE, VCC12BF, VCC12BG, VCC12BH, VCC12BI, VCC12BJ, VCC12BK, VCC12BL, VCC12BM, VCC12BN, VCC12BO, VCC12BP, VCC12BQ, VCC12BR, VCC12BS, VCC12BT, VCC12BU, VCC12BV, VCC12BW, VCC12BX, VCC12BY, VCC12BZ, VCC12CA, VCC12CB, VCC12CC, VCC12CD, VCC12CE, VCC12CF, VCC12CG, VCC12CH, VCC12CI, VCC12CJ, VCC12CK, VCC12CL, VCC12CM, VCC12CN, VCC12CO, VCC12CP, VCC12CQ, VCC12CR, VCC12CS, VCC12CT, VCC12CU, VCC12CV, VCC12CW, VCC12CX, VCC12CY, VCC12CZ, VCC12DA, VCC12DB, VCC12DC, VCC12DD, VCC12DE, VCC12DF, VCC12DG, VCC12DH, VCC12DI, VCC12DJ, VCC12DK, VCC12DL, VCC12DM, VCC12DN, VCC12DO, VCC12DP, VCC12DQ, VCC12DR, VCC12DS, VCC12DT, VCC12DU, VCC12DV, VCC12DW, VCC12DX, VCC12DY, VCC12DZ, VCC12EA, VCC12EB, VCC12EC, VCC12ED, VCC12EE, VCC12EF, VCC12EG, VCC12EH, VCC12EI, VCC12EJ, VCC12EK, VCC12EL, VCC12EM, VCC12EN, VCC12EO, VCC12EP, VCC12EQ, VCC12ER, VCC12ES, VCC12ET, VCC12EU, VCC12EV, VCC12EW, VCC12EX, VCC12EY, VCC12EZ, VCC12FA, VCC12FB, VCC12FC, VCC12FD, VCC12FE, VCC12FF, VCC12FG, VCC12FH, VCC12FI, VCC12FJ, VCC12FK, VCC12FL, VCC12FM, VCC12FN, VCC12FO, VCC12FP, VCC12FQ, VCC12FR, VCC12FS, VCC12FT, VCC12FU, VCC12FV, VCC12FW, VCC12FX, VCC12FY, VCC12FZ, VCC12GA, VCC12GB, VCC12GC, VCC12GD, VCC12GE, VCC12GF, VCC12GG, VCC12GH, VCC12GI, VCC12GJ, VCC12GK, VCC12GL, VCC12GM, VCC12GN, VCC12GO, VCC12GP, VCC12GQ, VCC12GR, VCC12GS, VCC12GT, VCC12GU, VCC12GV, VCC12GW, VCC12GX, VCC12GY, VCC12GZ, VCC12HA, VCC12HB, VCC12HC, VCC12HD, VCC12HE, VCC12HF, VCC12HG, VCC12HH, VCC12HI, VCC12HJ, VCC12HK, VCC12HL, VCC12HM, VCC12HN, VCC12HO, VCC12HP, VCC12HQ, VCC12HR, VCC12HS, VCC12HT, VCC12HU, VCC12HV, VCC12HW, VCC12HX, VCC12HY, VCC12HZ, VCC12IA, VCC12IB, VCC12IC, VCC12ID, VCC12IE, VCC12IF, VCC12IG, VCC12IH, VCC12II, VCC12IJ, VCC12IK, VCC12IL, VCC12IM, VCC12IN, VCC12IO, VCC12IP, VCC12IQ, VCC12IR, VCC12IS, VCC12IT, VCC12IU, VCC12IV, VCC12IW, VCC12IX, VCC12IY, VCC12IZ, VCC12JA, VCC12JB, VCC12JC, VCC12JD, VCC12JE, VCC12JF, VCC12JG, VCC12JH, VCC12JI, VCC12JJ, VCC12JK, VCC12JL, VCC12JM, VCC12JN, VCC12JO, VCC12JP, VCC12JQ, VCC12JR, VCC12JS, VCC12JT, VCC12JU, VCC12JV, VCC12JW, VCC12JX, VCC12JY, VCC12JZ, VCC12KA, VCC12KB, VCC12KC, VCC12KD, VCC12KE, VCC12KF, VCC12KG, VCC12KH, VCC12KI, VCC12KJ, VCC12KL, VCC12KM, VCC12KN, VCC12KO, VCC12KP, VCC12KQ, VCC12KR, VCC12KS, VCC12KT, VCC12KU, VCC12KV, VCC12KW, VCC12KX, VCC12KY, VCC12KZ, VCC12LA, VCC12LB, VCC12LC, VCC12LD, VCC12LE, VCC12LF, VCC12LG, VCC12LH, VCC12LI, VCC12LJ, VCC12LK, VCC12LL, VCC12LM, VCC12LN, VCC12LO, VCC12LP, VCC12LQ, VCC12LR, VCC12LS, VCC12LT, VCC12LU, VCC12LV, VCC12LW, VCC12LX, VCC12LY, VCC12LZ, VCC12MA, VCC12MB, VCC12MC, VCC12MD, VCC12ME, VCC12MF, VCC12MG, VCC12MH, VCC12MI, VCC12MJ, VCC12MK, VCC12ML, VCC12MM, VCC12MN, VCC12MO, VCC12MP, VCC12MQ, VCC12MR, VCC12MS, VCC12MT, VCC12MU, VCC12MV, VCC12MW, VCC12MX, VCC12MY, VCC12MZ, VCC12NA, VCC12NB, VCC12NC, VCC12ND, VCC12NE, VCC12NF, VCC12NG, VCC12NH, VCC12NI, VCC12NJ, VCC12NK, VCC12NL, VCC12NM, VCC12NN, VCC12NO, VCC12NP, VCC12NQ, VCC12NR, VCC12NS, VCC12NT, VCC12NU, VCC12NV, VCC12NW, VCC12NX, VCC12NY, VCC12NZ, VCC12OA, VCC12OB, VCC12OC, VCC12OD, VCC12OE, VCC12OF, VCC12OG, VCC12OH, VCC12OI, VCC12OJ, VCC12OK, VCC12OL, VCC12OM, VCC12ON, VCC12OO, VCC12OP, VCC12OQ, VCC12OR, VCC12OS, VCC12OT, VCC12OU, VCC12OV, VCC12OW, VCC12OX, VCC12OY, VCC12OZ, VCC12PA, VCC12PB, VCC12PC, VCC12PD, VCC12PE, VCC12PF, VCC12PG, VCC12PH, VCC12PI, VCC12PJ, VCC12PK, VCC12PL, VCC12PM, VCC12PN, VCC12PO, VCC12PP, VCC12PQ, VCC12PR, VCC12PS, VCC12PT, VCC12PU, VCC12PV, VCC12PW, VCC12PX, VCC12PY, VCC12PZ, VCC12QA, VCC12QB, VCC12QC, VCC12QD, VCC12QE, VCC12QF, VCC12QG, VCC12QH, VCC12QI, VCC12QJ, VCC12QK, VCC12QL, VCC12QM, VCC12QN, VCC12QO, VCC12QP, VCC12QQ, VCC12QR, VCC12QS, VCC12QT, VCC12QU, VCC12QV, VCC12QW, VCC12QX, VCC12QY, VCC12QZ, VCC12RA, VCC12RB, VCC12RC, VCC12RD, VCC12RE, VCC12RF, VCC12RG, VCC12RH, VCC12RI, VCC12RJ, VCC12RK, VCC12RL, VCC12RM, VCC12RN, VCC12RO, VCC12RP, VCC12RQ, VCC12RR, VCC12RS, VCC12RT, VCC12RU, VCC12RV, VCC12RW, VCC12RX, VCC12RY, VCC12RZ, VCC12SA, VCC12SB, VCC12SC, VCC12SD, VCC12SE, VCC12SF, VCC12SG, VCC12SH, VCC12SI, VCC12SJ, VCC12SK, VCC12SL, VCC12SM, VCC12SN, VCC12SO, VCC12SP, VCC12SQ, VCC12SR, VCC12SS, VCC12ST, VCC12SU, VCC12SV, VCC12SW, VCC12SX, VCC12SY, VCC12SZ, VCC12TA, VCC12TB, VCC12TC, VCC12TD, VCC12TE, VCC12TF, VCC12TG, VCC12TH, VCC12TI, VCC12TJ, VCC12TK, VCC12TL, VCC12TM, VCC12TN, VCC12TO, VCC12TP, VCC12TQ, VCC12TR, VCC12TS, VCC12TT, VCC12TU, VCC12TV, VCC12TW, VCC12TX, VCC12TY, VCC12TZ, VCC12UA, VCC12UB, VCC12UC, VCC12UD, VCC12UE, VCC12UF, VCC12UG, VCC12UH, VCC12UI, VCC12UJ, VCC12UK, VCC12UL, VCC12UM, VCC12UN, VCC12UO, VCC12UP, VCC12UQ, VCC12UR, VCC12US, VCC12UT, VCC12UU, VCC12UV, VCC12UW, VCC12UX, VCC12UY, VCC12UZ, VCC12VA, VCC12VB, VCC12VC


[illegible]

Note: Short J26 when OSC

 ASIX ELECTRONICS CORPORATION	
Title AX99100/EEPROM/PC-104 Interface	
Size Custom	Document Number AX99100 Local Bus Demo Board
Date: Thursday, November 12, 2020	Sheet 3 of 4
Rev 1.02	

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
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