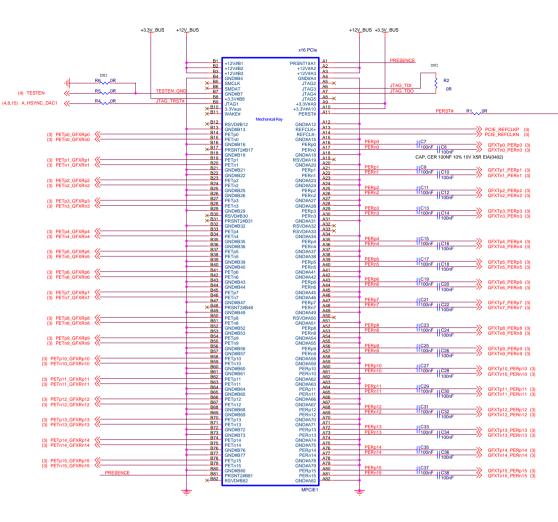


PCI-EXPRESS EDGE CONNECTOR



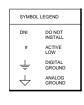
Power Sequence Circuit to ensure SMPS_EN is released after +12V_BUS and +3.3V_BUS are both in regulation. Pull-up may or may not be required on SMPS_EN signal depending on SMPS design.

Node 1 When +12V ramps above min Vbe, SMPS_EN will be helt low Node 2 When +3.3V gets close to regulation, one of the two conditions of releasing SMPS_EN is active

Target ~ 900mV when +3.3 at min regulation (worse case)
Typical trigger when +3.3V ramps above 2.2V (650mV)

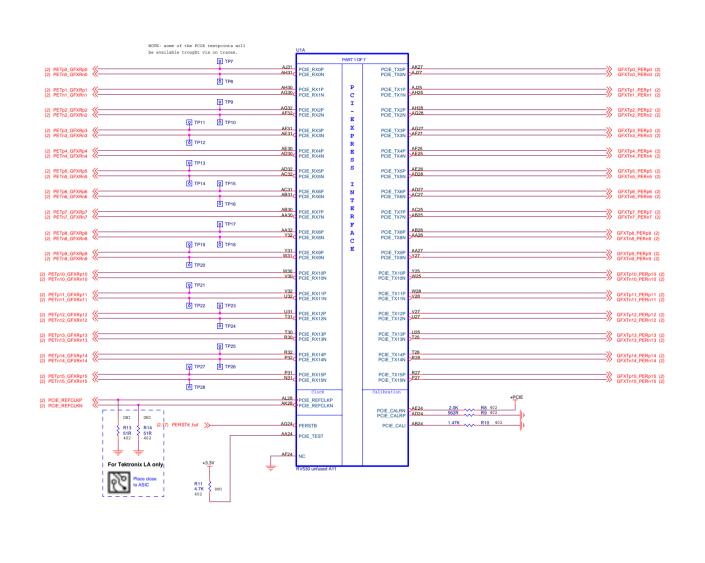
Node 3 When +12V gets close to regulation, one of the two conditions of releasing SMPS_EN is active

Target ~ 1.25V when +12 at min regulation (worse case)
Typical trigger when +12V ramps above 10V (1.1V)

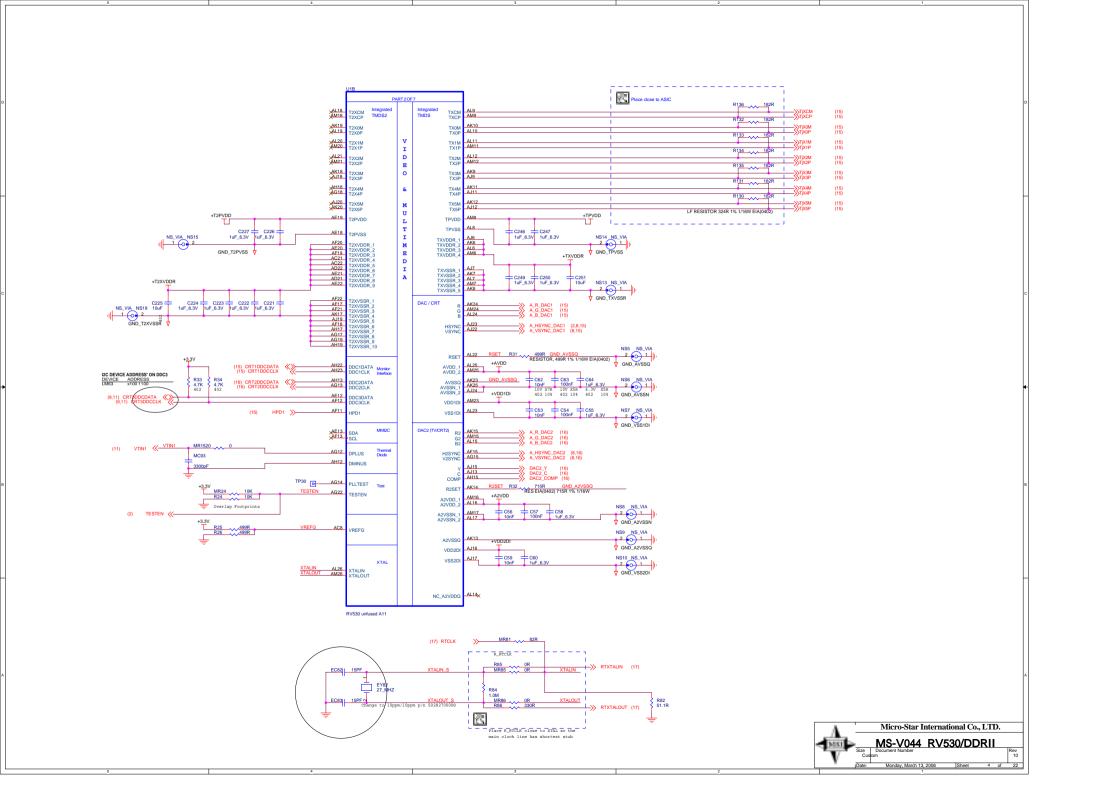


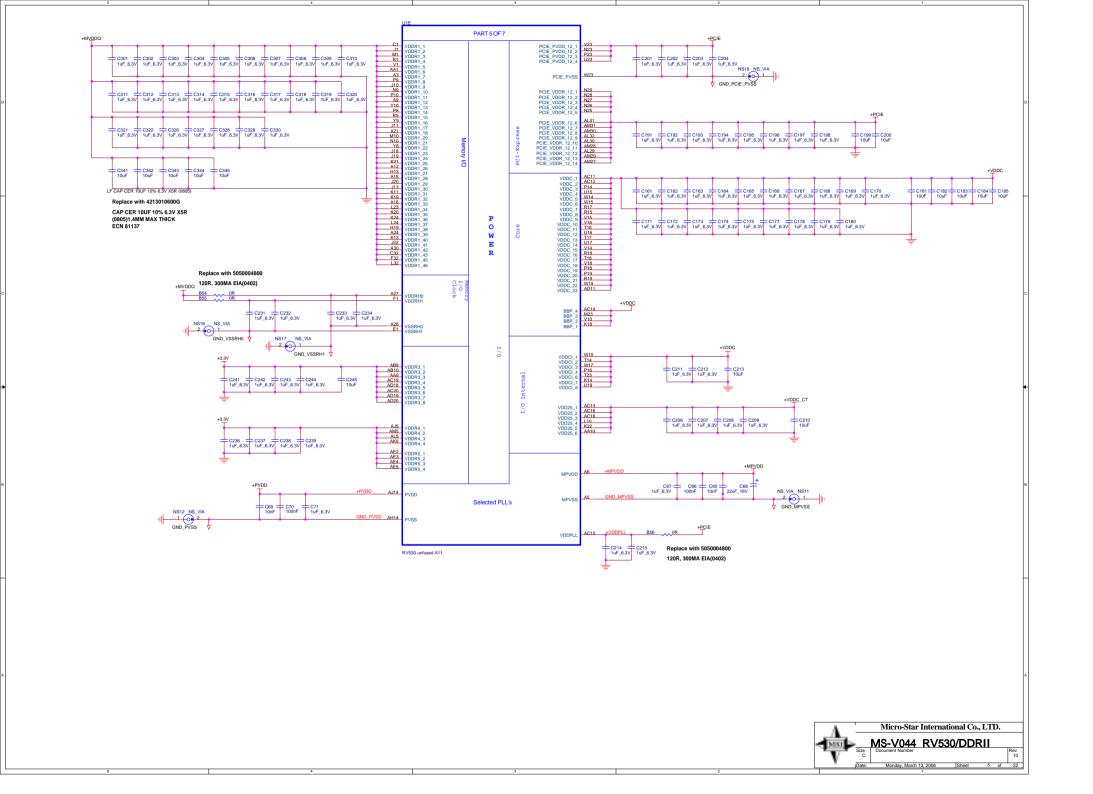
CAP CERAMIC 100NE 10% 10V X5R EIA(0402)



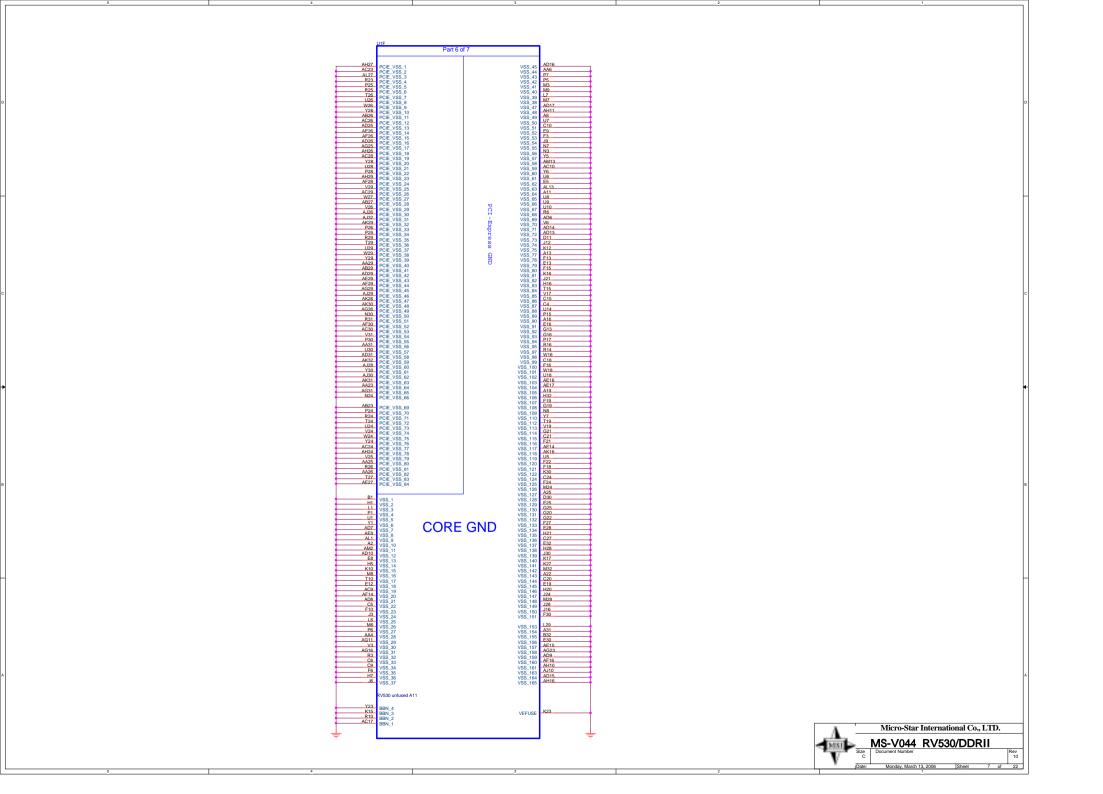


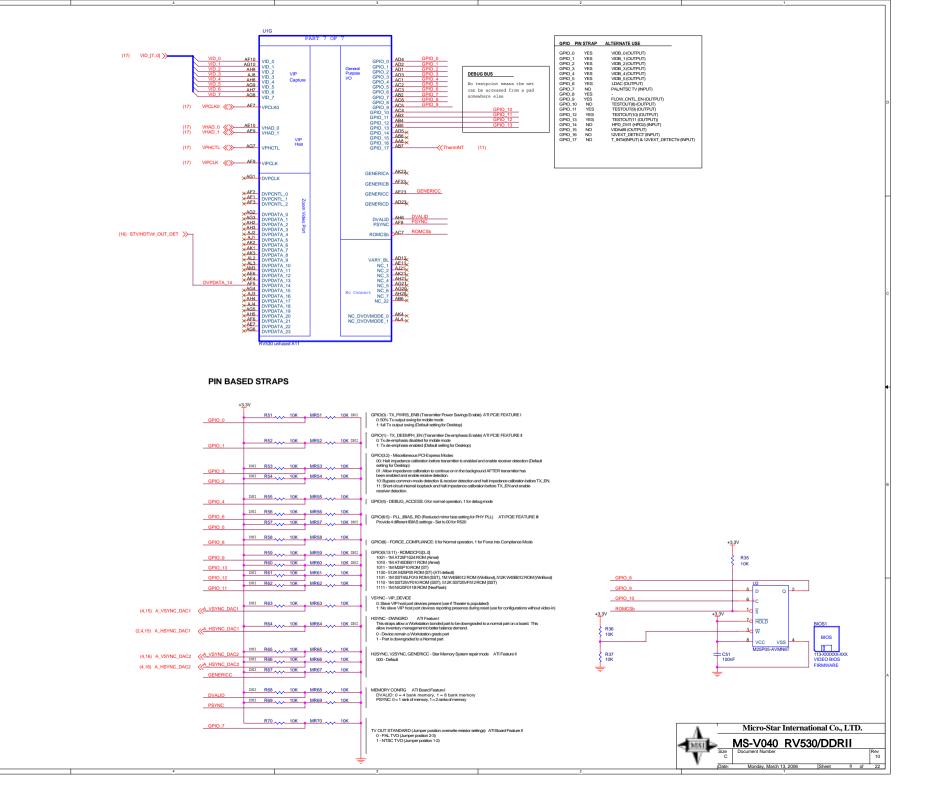
| Micro-Star International Co., LTD. | MS-V044 RV530/DDRII | Size | Document Number | Rev 10 | | Date: Monday, March 13, 2006 | Sheet 3 of 22

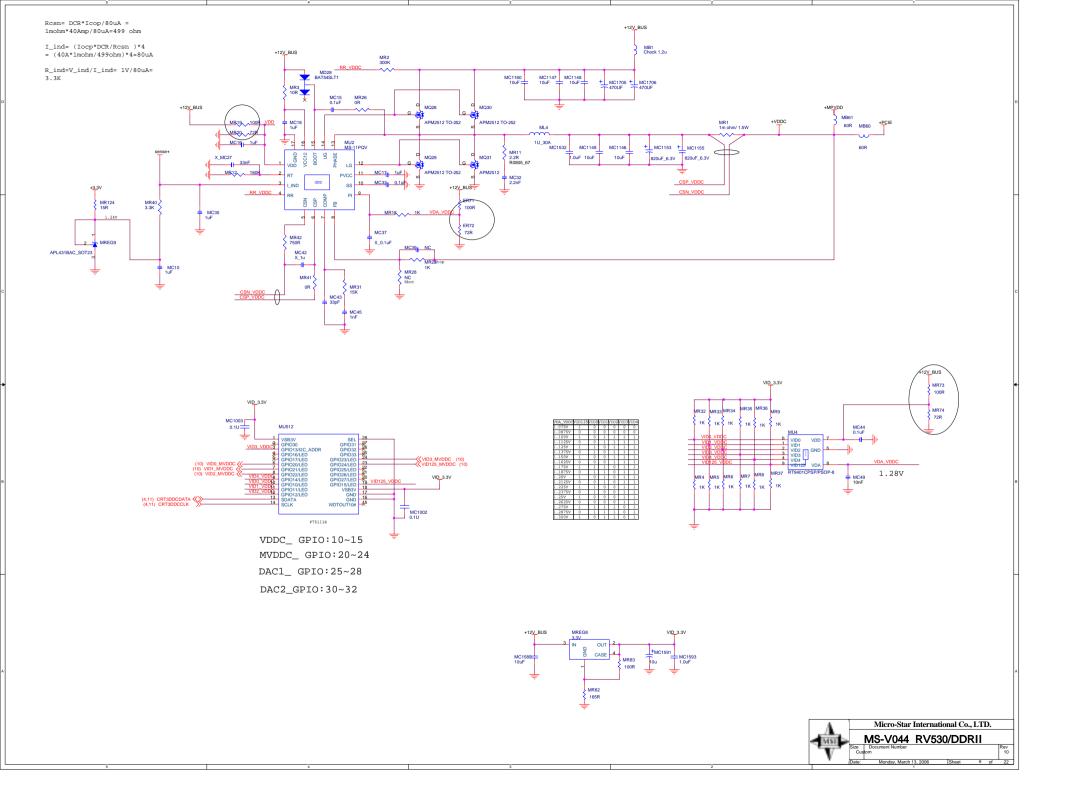


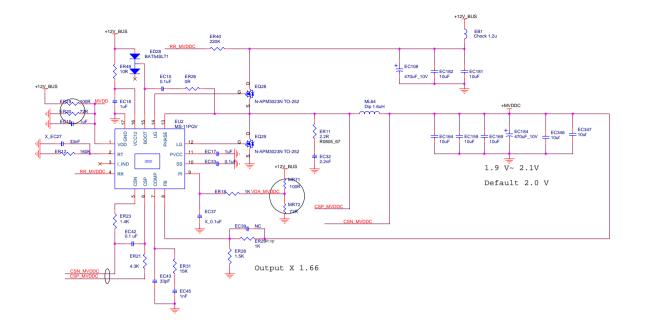


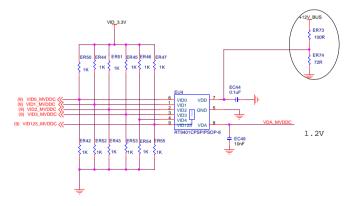
RV530 MEMORY CHANNELS A and B Channel B Channel A (14) M_MDB[63..0] «>> M_MAB[12..0] (14) Part 4 of 7 (13) M_MDA[63..0] «> →>> M_MAA[12..0] (13) Part 3 of 7 MAA_0 MAA_1 MAA_2 MAA_3 MAA_6 MAA_6 MAA_7 MAA_1 MAA_1 MAA_1; MAA_1; MAA_1; MAA_1; MEMORY INTERFACE A MEMORY INTERFACE B M_MAA[15..14] (13) >>> M_DQMA#[7..0] (13) DQMBb DQMBb DQMBb DQMBb DQMBb DQMBb DQMBb DQMBb DQMAb_C DQMAb_C DQMAb_C DQMAb_C DQMAb_C DQMAb_C DQMAb_C ✓ M_QSB[7..0] (14) ✓ M_QSA[7..0] (13) QSB QSB QSB QSB QSB QSB QSB QSB QSA_G QSA_G QSA_G QSA_G QSA_G QSA_G QSB_0B QSB_1B QSB_2B QSB_3B QSB_4B QSB_5B QSB_6B QSB_7B QSA_0B QSA_1B QSA_2B QSA_3B QSA_4B QSA_5B QSA_6B QSA_7B ODTB0 ODTA0 ODTA0 ODTA0 For DDR2 C2 >>> CKEB0 CKEB0 CKEA0 B30 CKEA0 RASB0b RASA0b DB28 >>> RASA#0 (13) CASB0b DD3 CASB#0 CASA0b OC29 >>> CASA#0 (13) +MVDDQ WEB0b DB2 >> WEB#0 +MVDDQ (14) WEA0b DB31 >>> WEA#0 (13) CLKA1 CLKA1 (13) CLKA1b CLKA#1 (13) C351 = C352 100nF 10nF CKEB1 13 CKEB1 R162 100R 1% (14) CKEA1 C22 >>> CKEA1 (13) C355 C356 100nF 10nF RASB1b OJ2 >>> RASB#1 (14) DRAM RST RASA1b 0B24 >>> RASA#1 (13) CASB1b OL2 >>> CASB#1 (14) TEST MOLK CASA1b 0B22 >>> CASA#1 (13) WEB1b 0M2_>> WEB#1 TEST_YCLK WEA1b 0B21 >>> WEA#1 (13) K2_→> CSB#1_0 (14) MEMTEST R172 R171 R170 4.7K 4.7K 4.7K R169 > 243R LF RES EIA(0402) 243R 1% 1/16W RESISTOR, 4.7K 5% 1/16W EIA(0402) Micro-Star International Co., LTD. MS-V044 RV530/DDRII Monday, March 13, 2006 Sheet 6 of 22



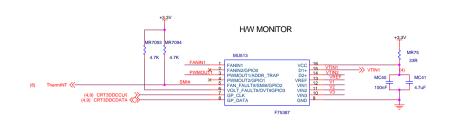


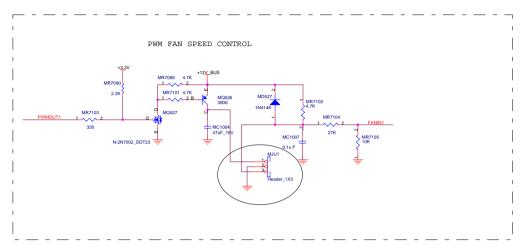


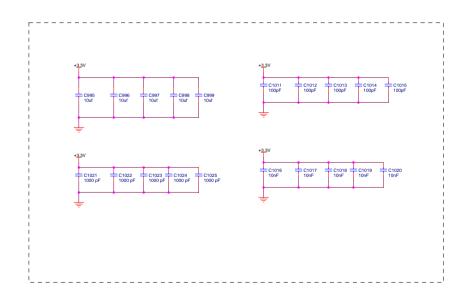


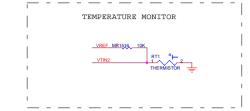


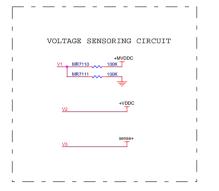




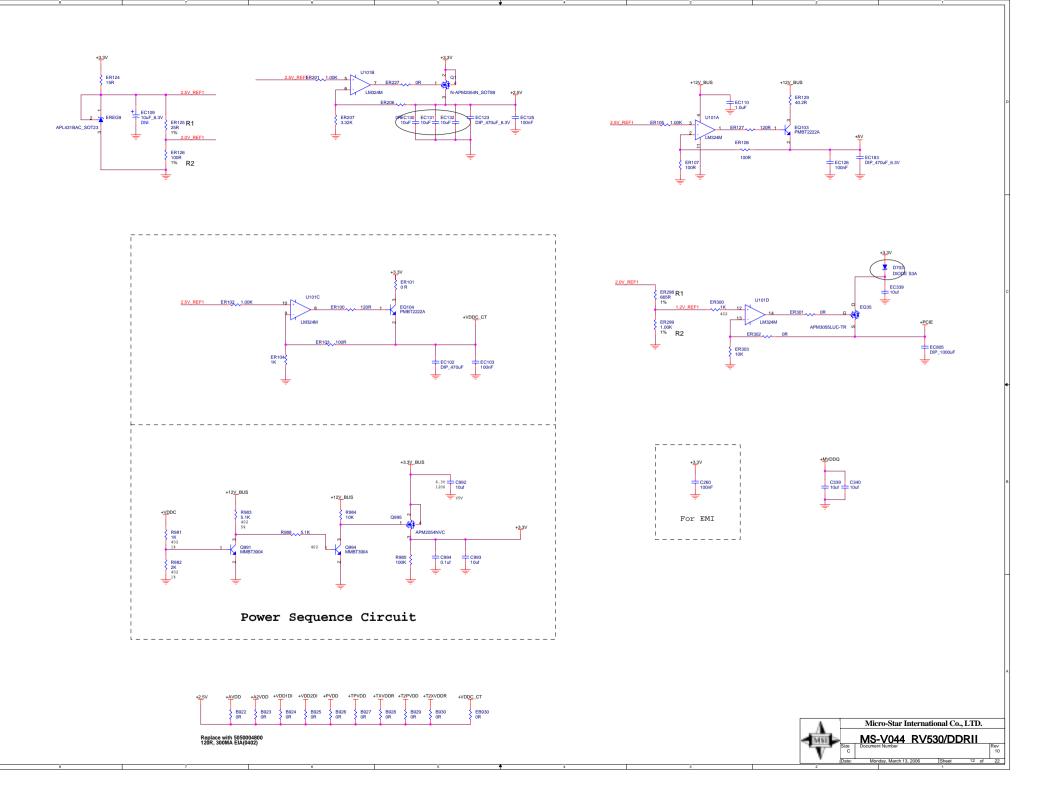




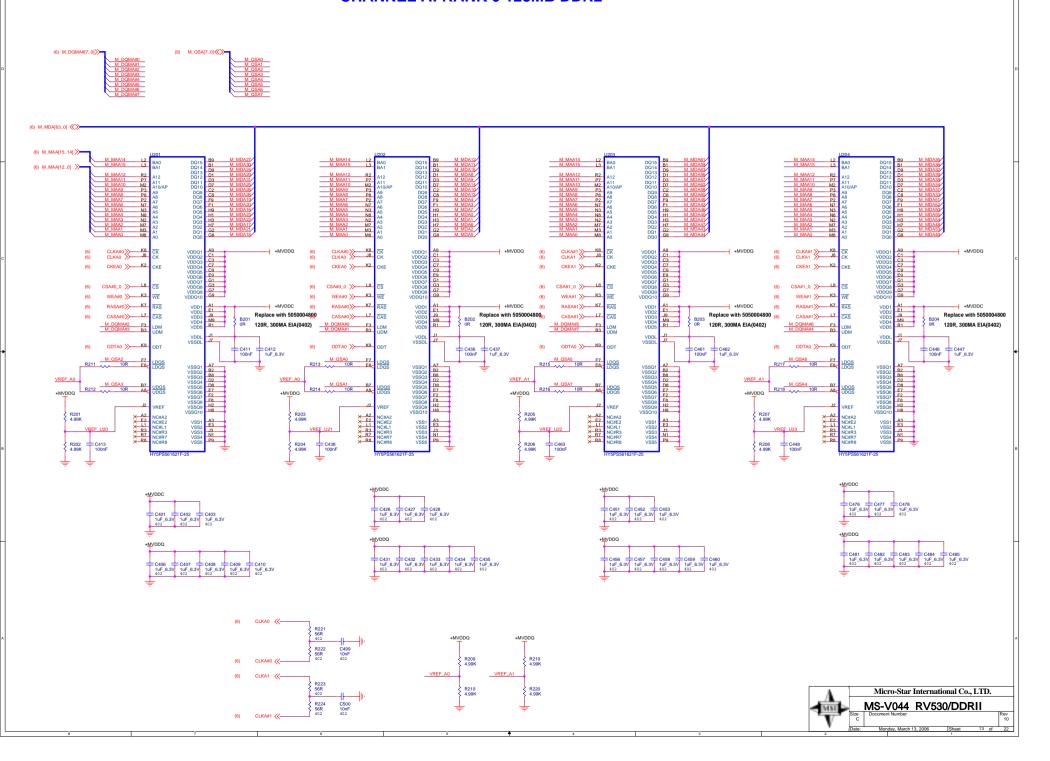








CHANNEL A: RANK 0 128MB DDR2



CHANNEL B: RANK 0 128MB DDR2

