P489-A02 DESIGN - G73, 128/256/512 MB DDR2 VGA, DVI-I, HDMI, SDTV, HDTV, SCART

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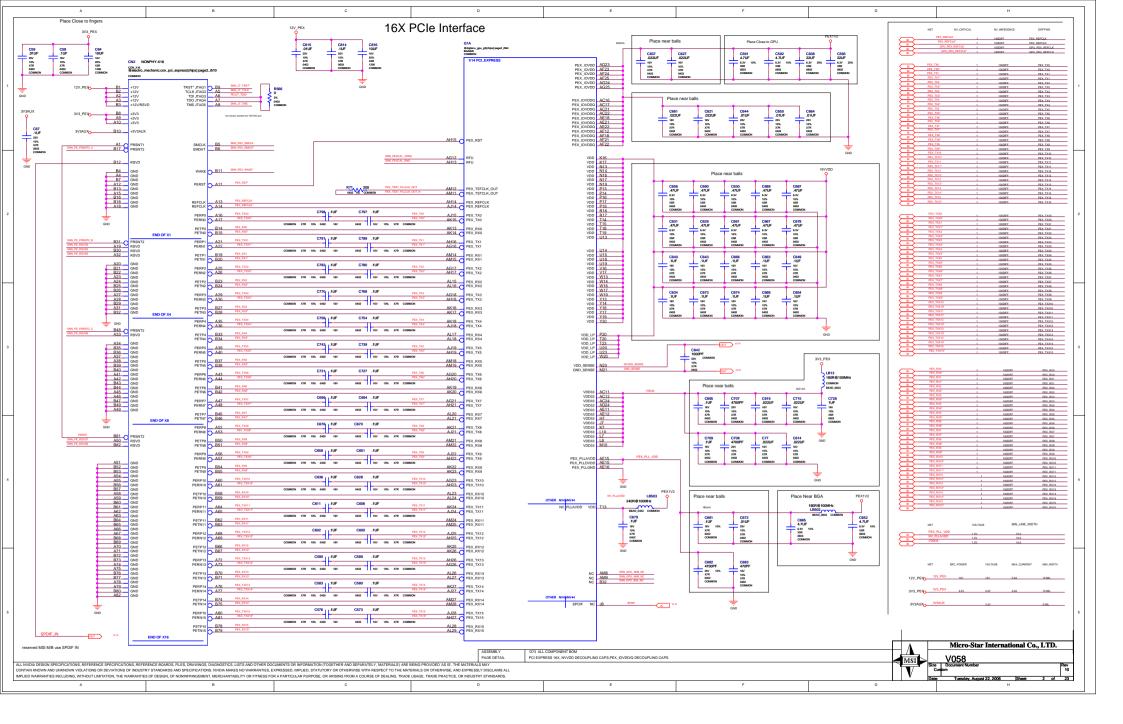
Page 12: add HDMI using common mode choke

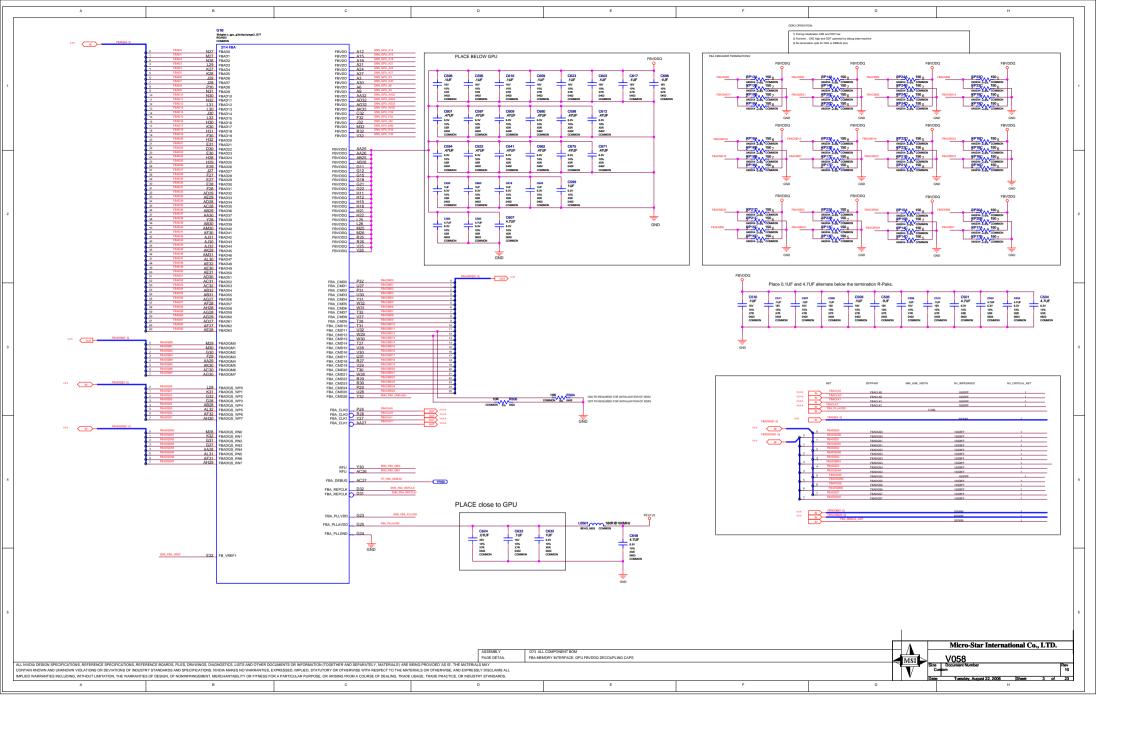
V058-10 History

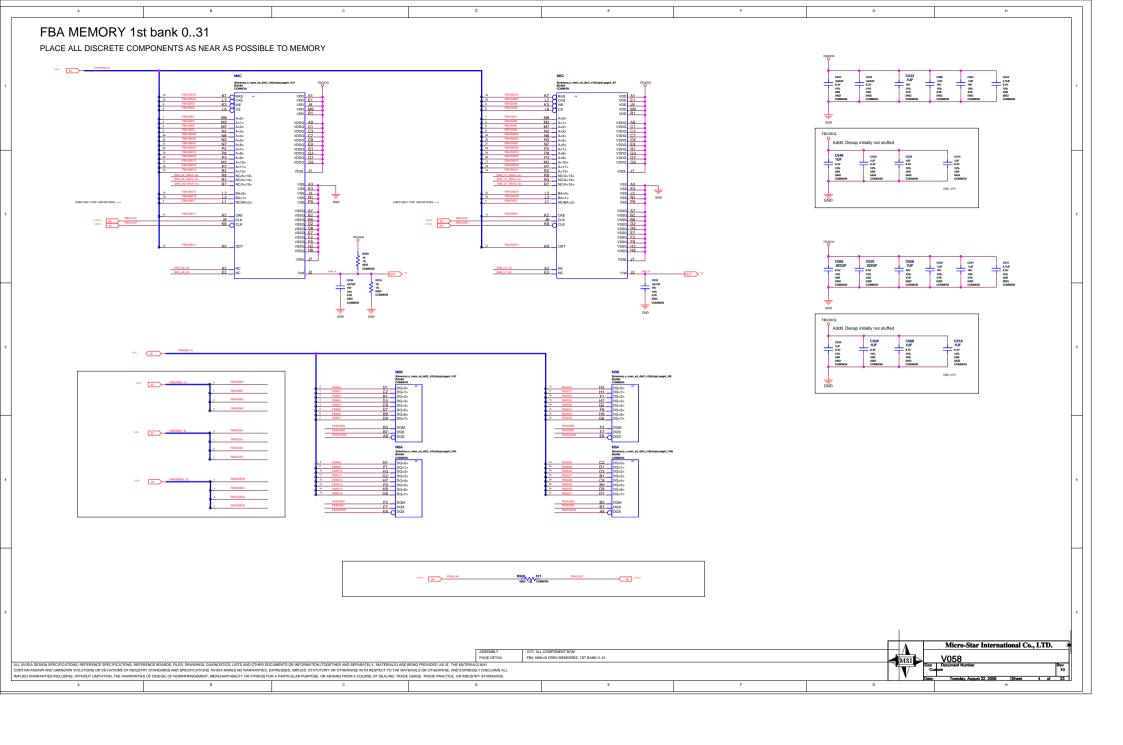
Page 14: add SCART Vcc 2.5V.

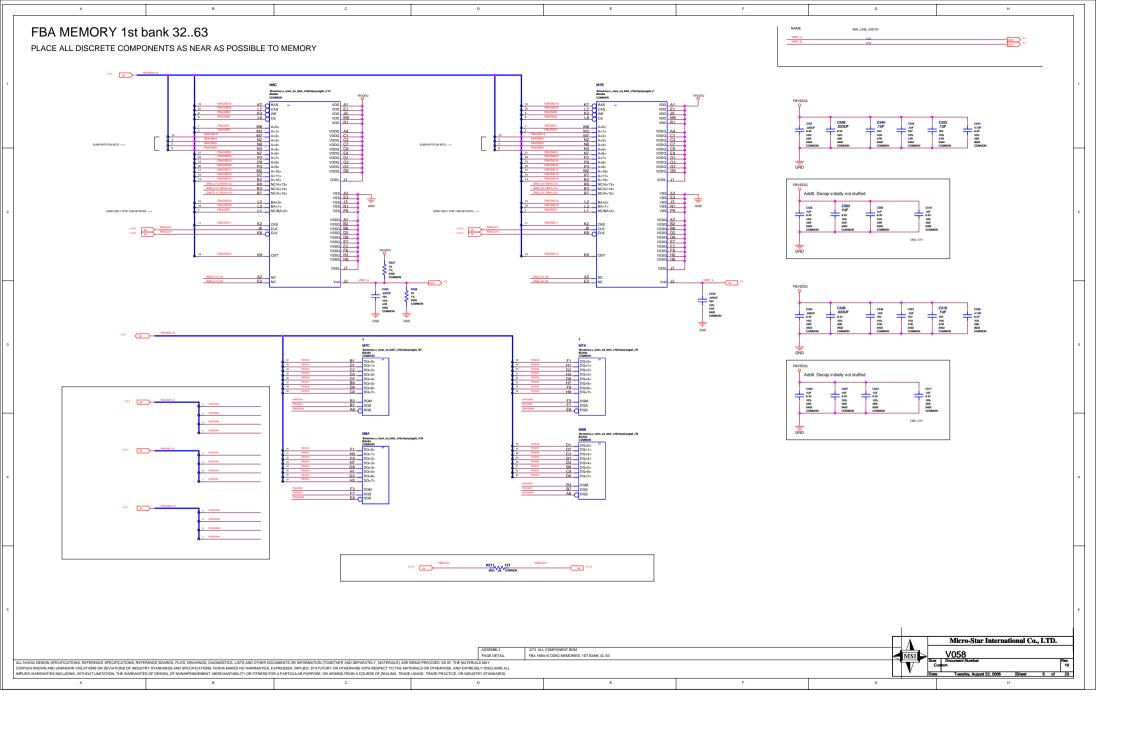
axu	VARIANT	NVPN	SEMBLY				
В	BASE	600-10489-9998-200	. COMPONENT BOM				
- 1	0000	600-10489-0000-200	/400Mhz 256Mb 128bit DDR2, DVI-I+HDMI+SDTV+SCART				
2	0001	600-10489-0001-200	00/400Mhz 256Mb 126bit DDR2, DVI-l+HDMI+SDTV+YPrPb				
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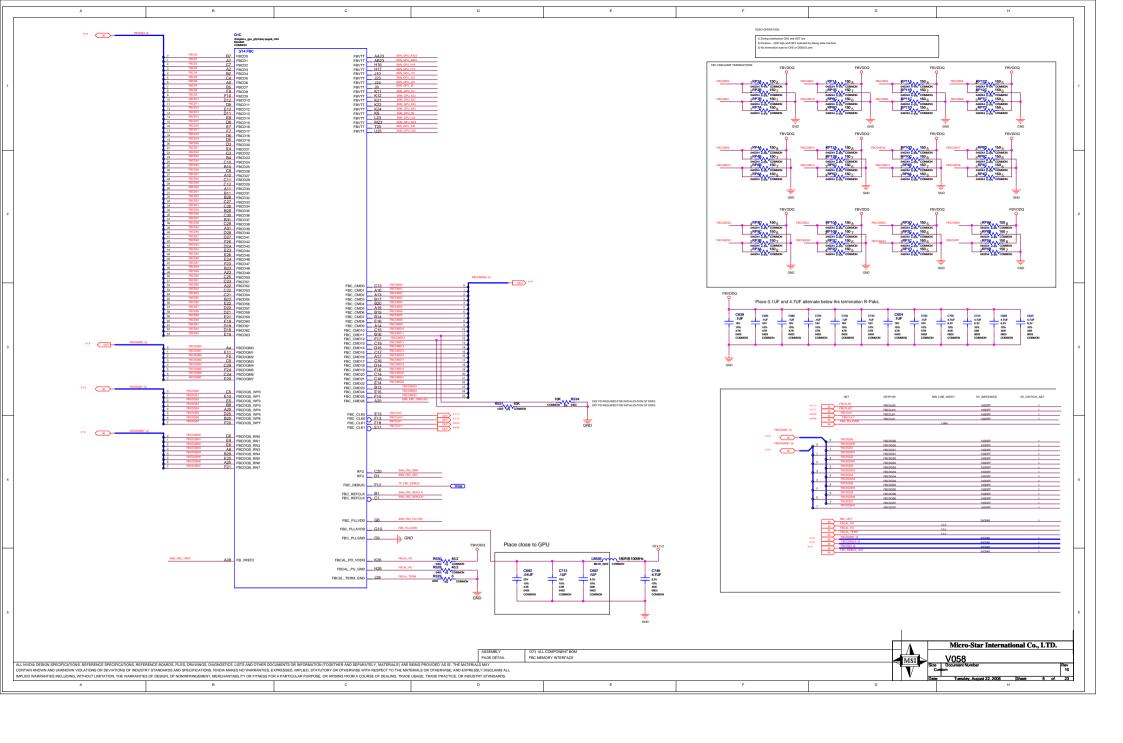
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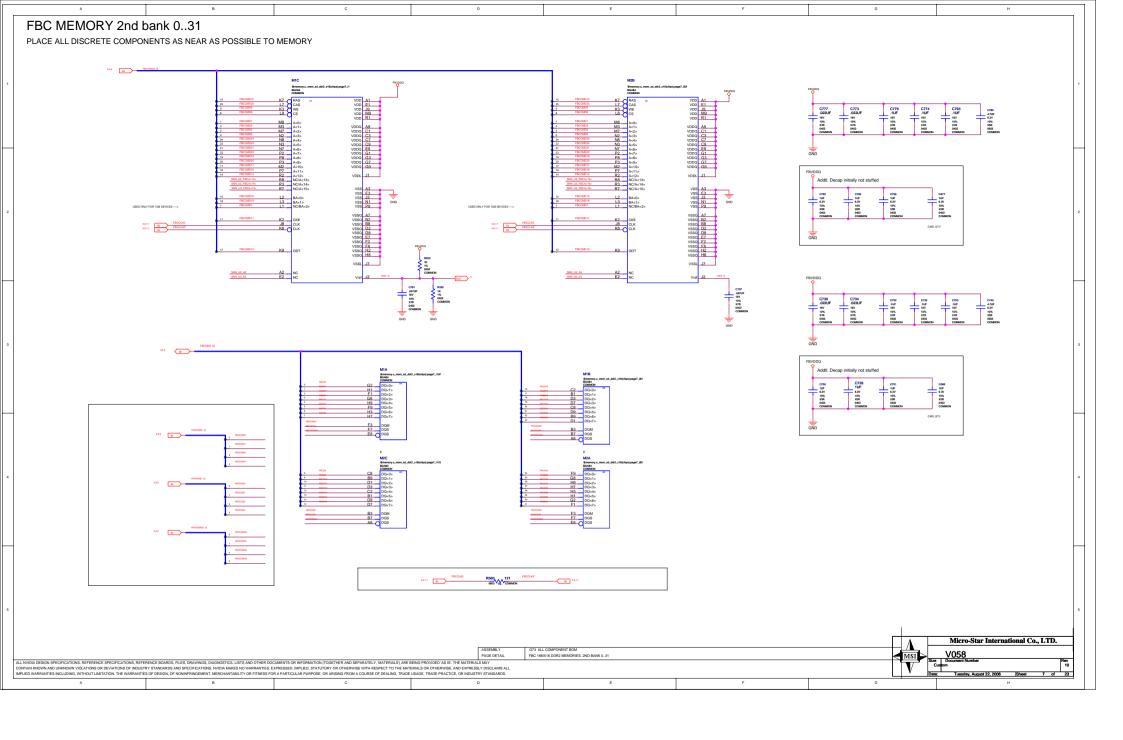


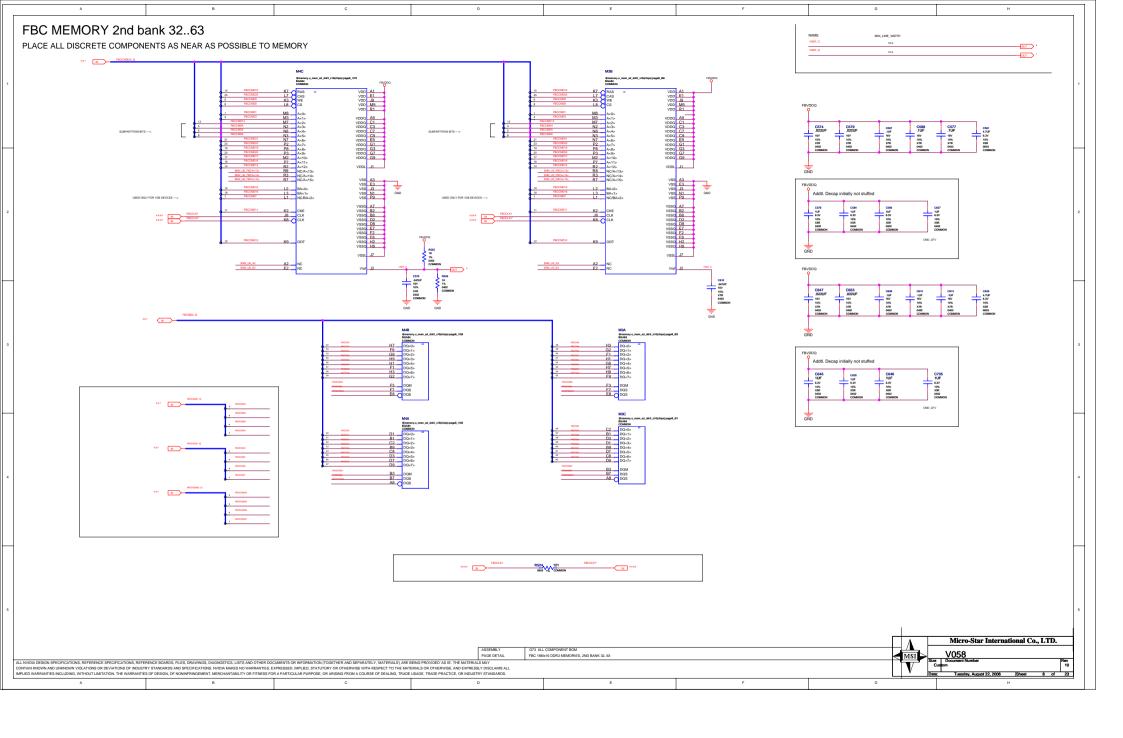


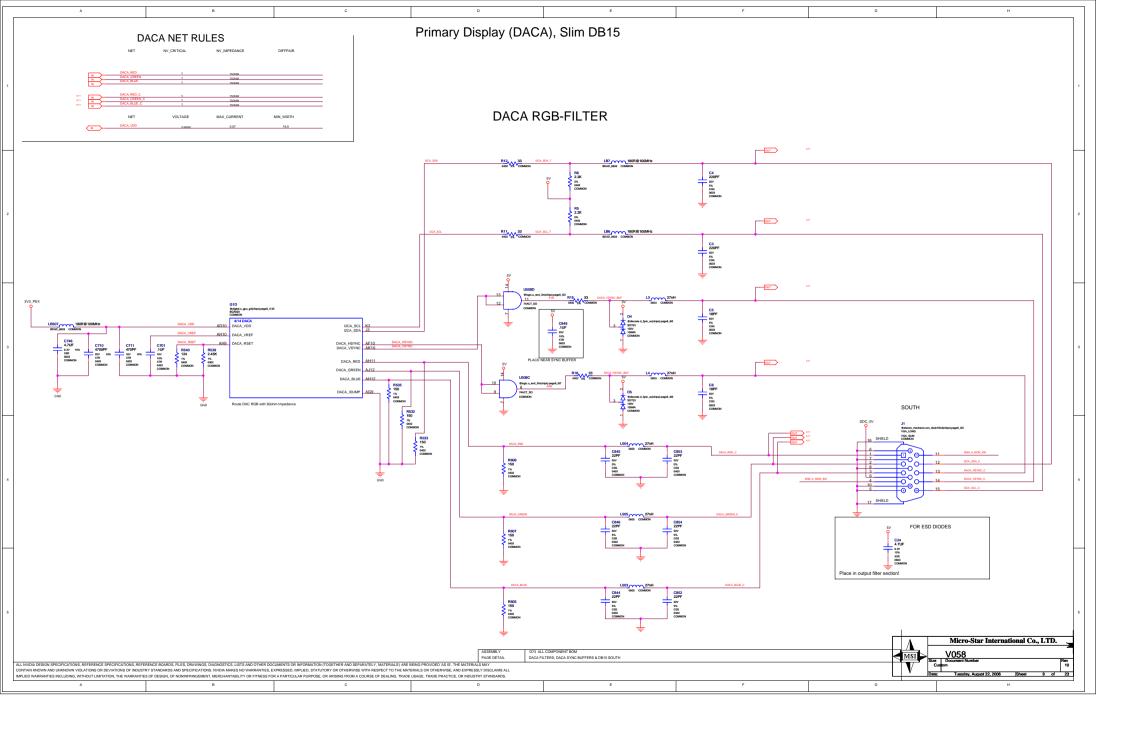


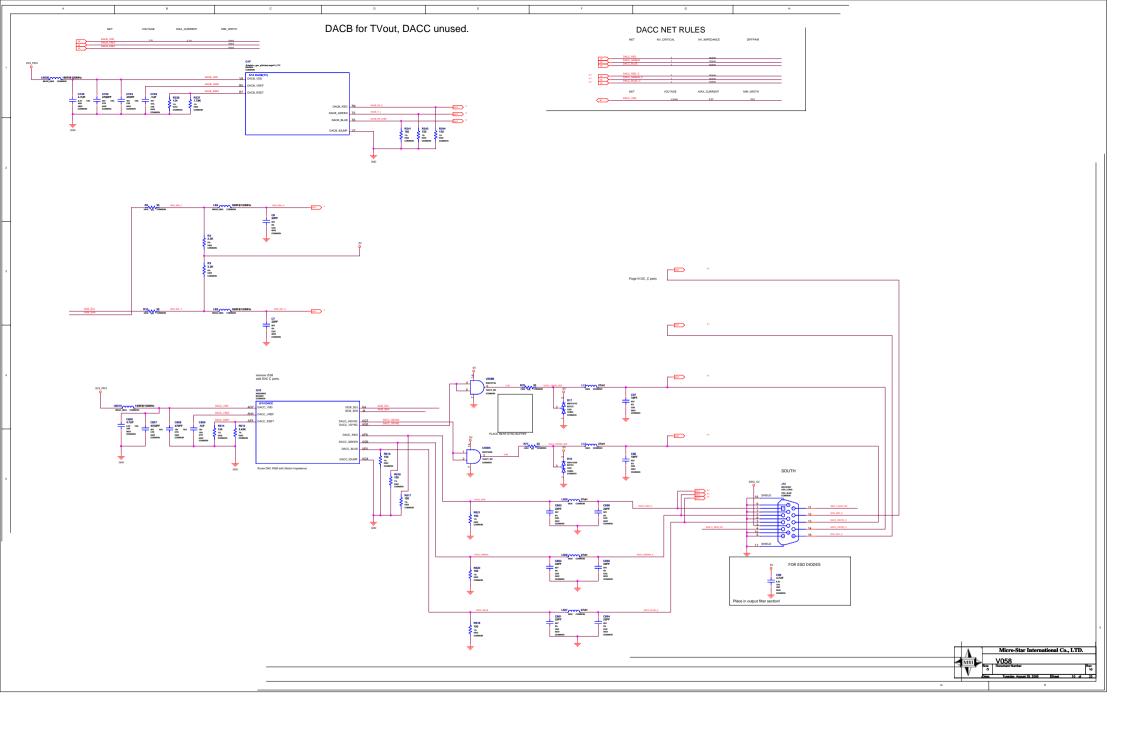


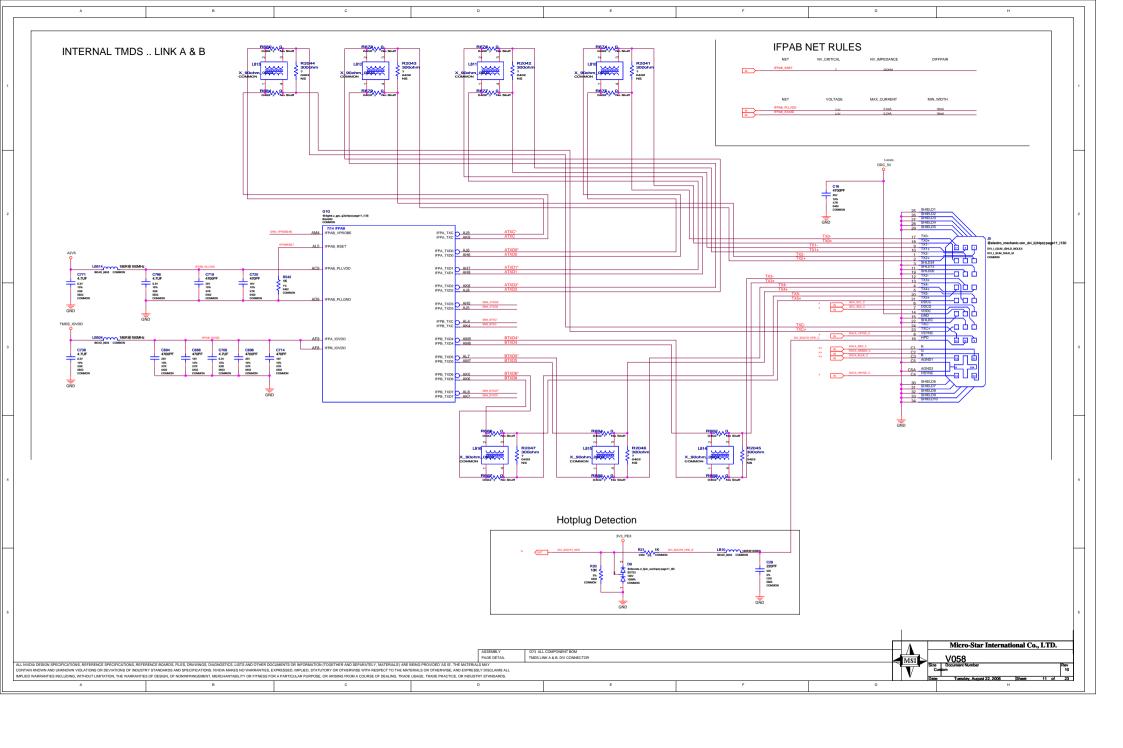


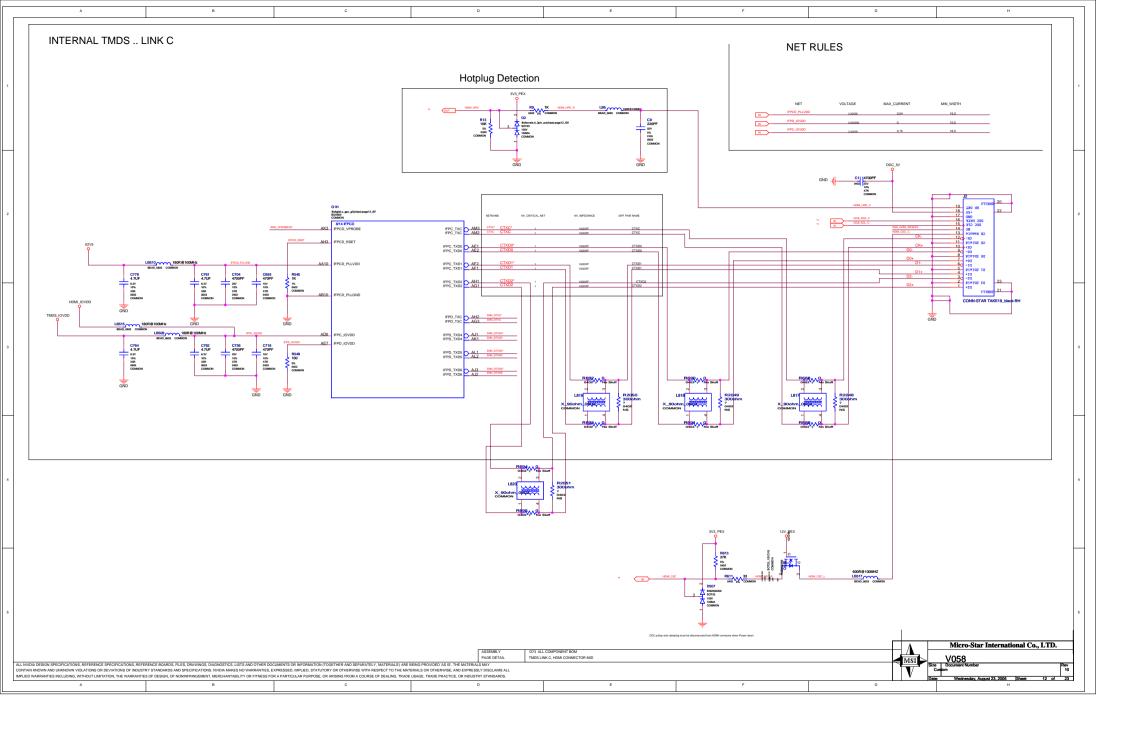


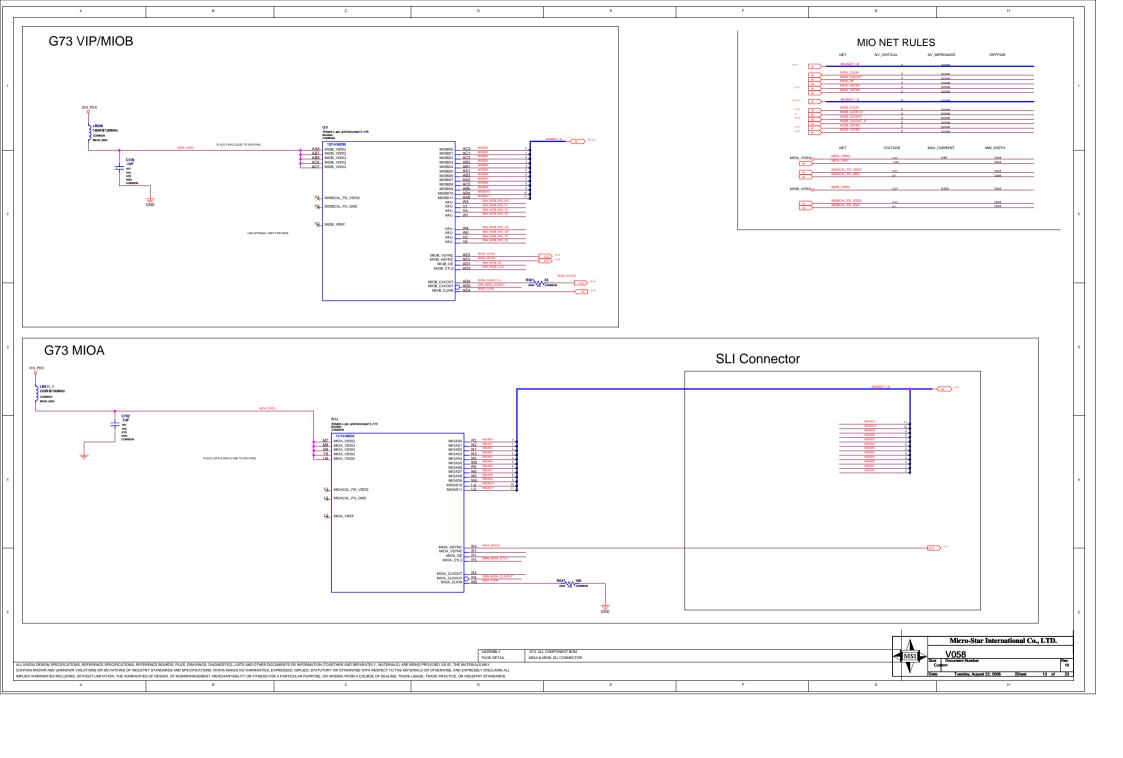


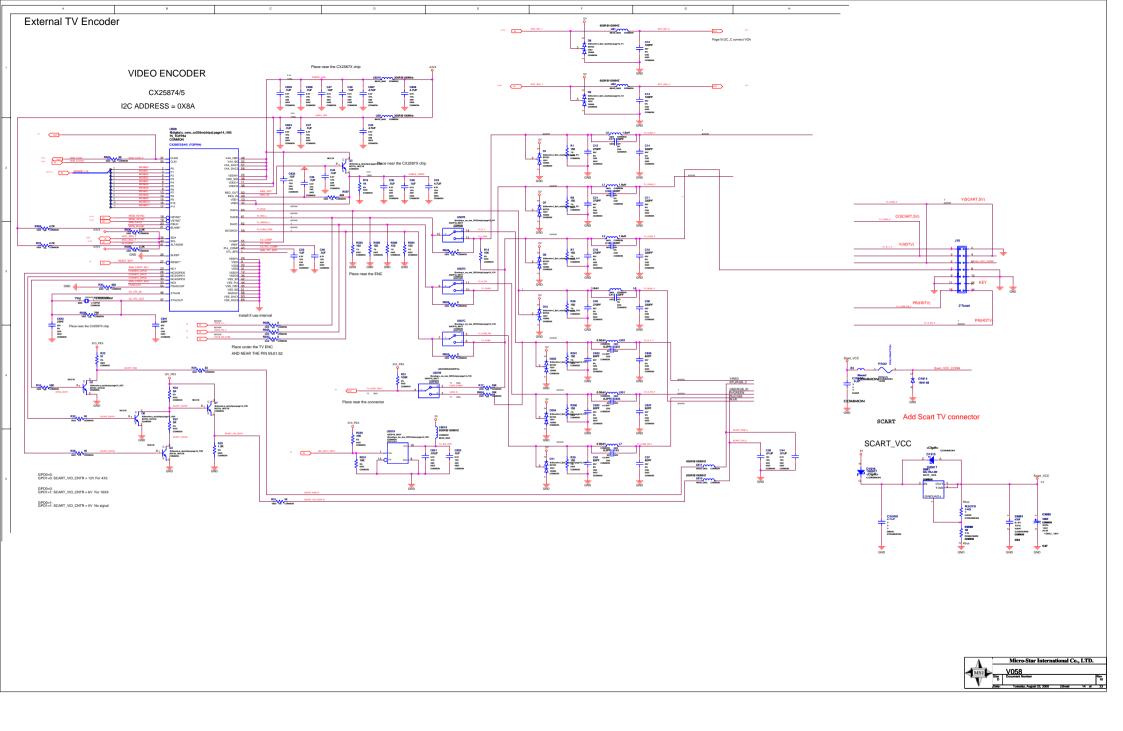


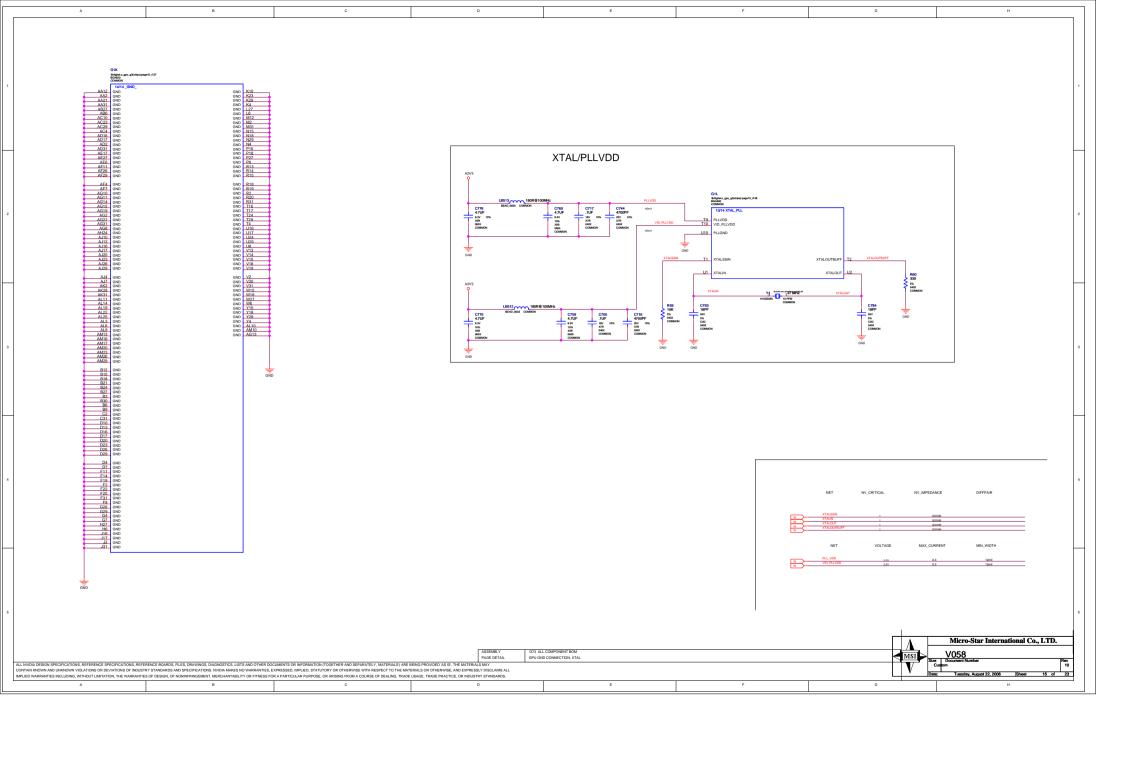


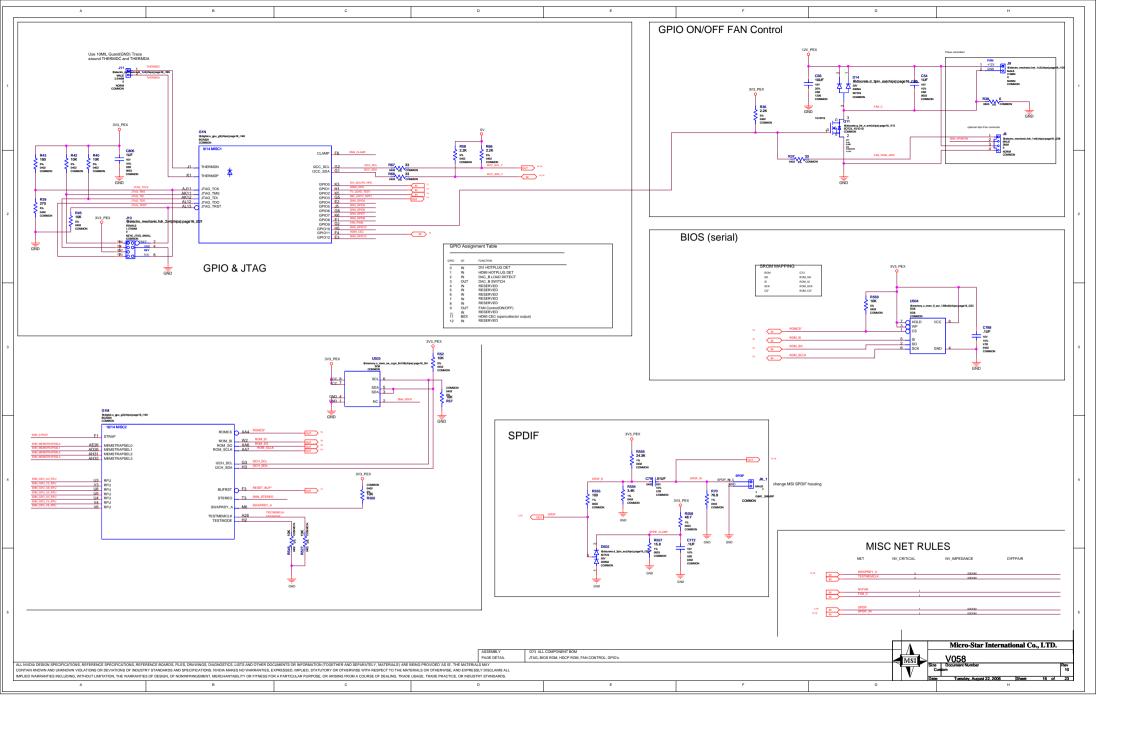


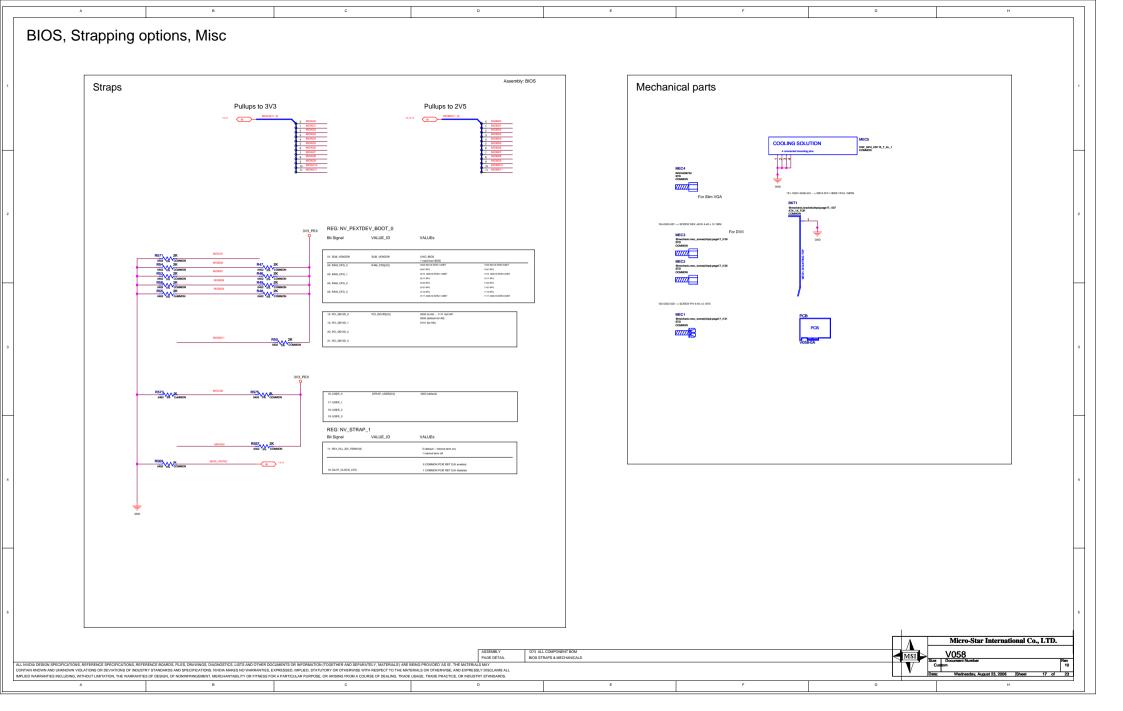


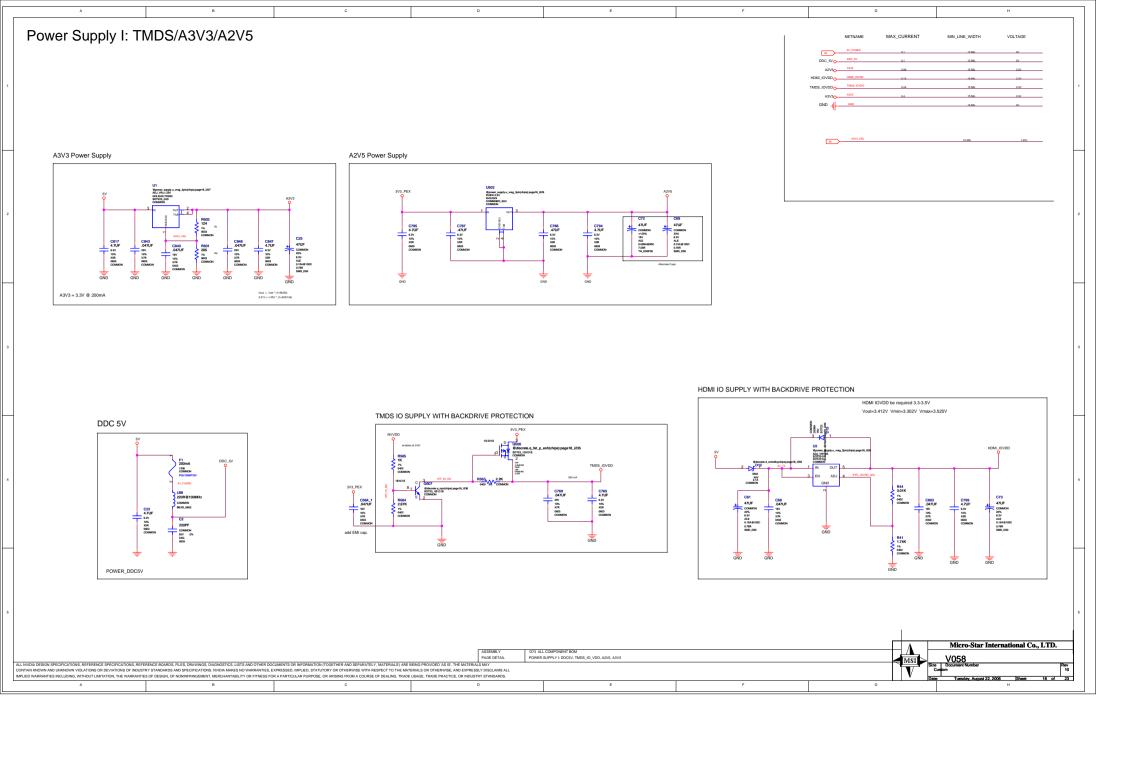


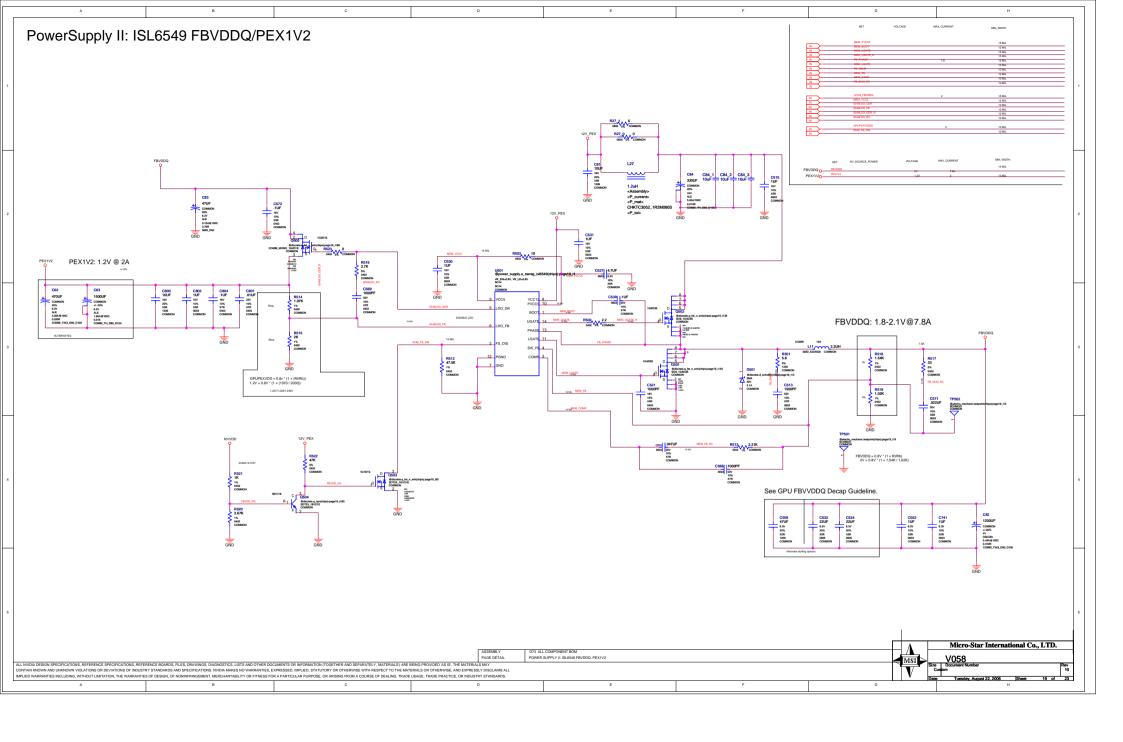


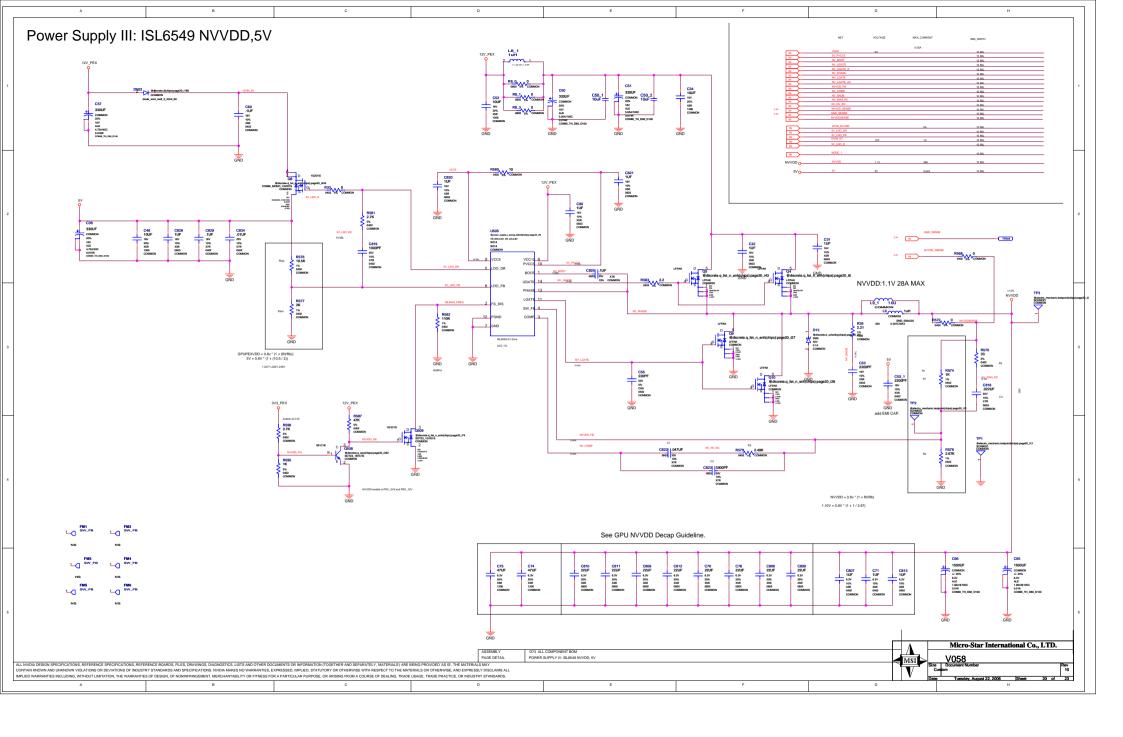












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Title: Basienst Report Design: design	4.20c 4.50c FBACIK0* 3.3Fc 3.40c 4.2Ac	FBAD-41> 3.28.5.4C FBAD-42> 3.28.5.4C	FBCCMD<17> 6.1H 6.3C 7.2B 7.2E 8.2B 8.2E	FBCDQS-2> 6.38 640 7.48 7.4D FBCDQS-3> 6.38 640 7.48 7.4D	MIOAD-2> 13.4D 13.4G 17.1C 17.3B	PEX_RX12 2.48.2.4G⇔ PEX_RX12* 2.4G⇔ 2.58	
Date: Jun 9 15:43:26 2006	42Dc45Ec	FRADod35 328 54C	FBCCMD<18> 6.2H 6.3C 7.2B 7.2E	FBCDQS-4> 6.38 6.4G 8.3C 8.4B	MIQAD<3> 13.4D 13.4G 17.1C	PEX_RX13 2.4G⇔ 2.5B	
Base nets and synonyms for	FBACLK1 3.3F< 3.4D> 5.2A< 5.2D< 5.5D<	FBAD-44- 3.28 5.4C FBAD-45- 3.28 5.4C	82B 82E FBCCMD<19> 6.1F 6.3C 7.2B 7.2E	FBCDQS:d5> 6.38 6.40 8.46 8.4C FBCDQS:d5> 6.48 6.40 8.3E 8.4B	MICAD-d> 13.4D 13.4G 17.1C MICAD-d> 13.4D 13.4G 17.1C	PEX_RX13* 2.4G⇔ 2.5B PEX_RX14 2.4G⇔ 2.5B	
p489_lib.DESIGN(@p489_lib.design(sch_1))	FBACLK1* 3.3F< 3.4D> 5.2A<	FBAD-46> 3.28 5.4C	828 82E	FBCDQS<7> 6.48 6.4G 8.4B 8.4E	MIOAD-6> 13.4D 13.4G 17.1C	PEX_RX14* 2.4G > 2.5B	
Base Signal Location([Zone][dr])	5.2D< 5.5E< FBACMD <b 3.1f="" 3.2c="" 4.1b="" 4.1d<="" td=""><td>FBAD-47> 3.28.5.4C FBAD-48> 3.28.5.3D</td><td>FBCCMD<20> 6.2G 6.3C 7.2B 7.2E 8.2B 8.2E</td><td>FBCDQSN<0> 6.48 6.4G 7.48 7.4C FBCDQSN<7.0> 6.4A<0 6.4F<0 7.48<</td><td>MIOAD-0'> 13.4D 13.4G 17.2C MIOAD-0> 13.4D 13.4G 17.2C</td><td>PEX_RX15 2.4G<>2.5B PEX_RX15* 2.4G<>2.5B</td><td></td>	FBAD-47> 3.28.5.4C FBAD-48> 3.28.5.3D	FBCCMD<20> 6.2G 6.3C 7.2B 7.2E 8.2B 8.2E	FBCDQSN<0> 6.48 6.4G 7.48 7.4C FBCDQSN<7.0> 6.4A<0 6.4F<0 7.48<	MIOAD-0'> 13.4D 13.4G 17.2C MIOAD-0> 13.4D 13.4G 17.2C	PEX_RX15 2.4G<>2.5B PEX_RX15* 2.4G<>2.5B	
3V3AUX 2.5G 3V3_PEX 2.5G	FBACMD-25.0> 3.2D>3.4F< 4.1A<	FBAD-4b 328 53D FBAD-4b 328 53D	FBCCMD-215 8 2H 6 3C 7 28 7 2F	8.4Bs	MIOAD-9> 13.4D 13.4G 17.2C	PEX_TEST_PLLCIK_OU 2:2C	1
3V3_PEX 2.5G 5V 20.2G	5.1Ac FBACMD<1> 3.2F 3.3C 4.1B 4.1D	FBAD-50> 3.28.5.3D FBAD-51> 3.28.5.3D	8.18.8.1E	FBCDQSN:1> 6.4B 6.4G 7.4B 7.4C FBCDQSN:2> 6.4B 6.4G 7.4D 7.5B	MIOAD<10> 13.4D 13.4G 17.2C MIOAD<11> 13.4D 13.4G 17.2C	T PEX_TEST_PLLCLK_OU 2.2C	
5V_FUSED 18.1G< 18.4B	5.1B 5.1D	FBAD-52> 3.28 5.3D	FBCCMD<22> 6.2F 6.3C 7.1B 7.1E FBCCMD<23> 6.2F 6.3D 7.2B 7.2E	FBCDQSN<3> 6.48 6.4G 7.4D 7.5B	MIOA_CLKIN 13.1F<13.5D	T_N	
5V_LDO_DR 20.1F< 20.2D 5V LDO FB 20.1F< 20.3D	FBACMD<2> 3.1F 3.3C 4.1B 4.1D FBACMD<3> 3.2F 3.3C 4.1B 4.1D	FBAD-53> 3.38.530 FBAD-54> 3.38.53D	8.18.8.1E FBCCM0<24> 6.20.6.30.7.18.7.1E	FBCDQSN-4> 6.48 6.4G 8.3C 8.4B FBCDQSN-5> 6.48 6.4G 8.48 8.4C	MIOA_CLKOUT 13.1F< 13.5D MIOA_DE 13.1F< 13.5D	PEX_TX0 2.1G >> 2.2C	
5V_LDO_R 20.1F< 20.2C	518510	FRAD-455 338 530	FRCCMD-255 6 2F 6 3D 7 1B 7 1F	FBCDQSN-65	MIDA HSVNC 13.15; 13.95; 17.40;	PEX_TX0* 2:10 > 2:0 PEX_TX1 2:10 > 2:0	
5V_LDO_RC 20.2C 5V_PVCC5 20.1F<20.2E	FBACMD-6> 3.1G 3.3C 5.1B 5.1D FBACMD-6> 3.1G 3.3C 5.1B 5.1D	FBAD-56> 3.38 5.4D	8.18.8.1E FBCD<0> 8.18.7.3C	FBCDQSN<7> 6.48 6.49 8.4E FBC_DEBUG_DDT 6.5G<	MIOA_VDDQ 13.2G 13.3B MIOA_VREF 13.2F<13.4B	PEX_TX1* 2:10 ⇒ 2:20 PEX_TX2 2:10 ⇒ 2:20	
5V_PVCC5 20.1F< 20.2E 5V_T2 18.4F	FBACMD-65 3.1G 3.3C 5.1B 5.1D FBACMD-65 3.1G 3.3C 5.2B 5.2D	FBAD-57> 3.38 5.4D FBAD-58> 3.38 5.4D	FBCD-63.0> 6.18-7.3C FBCD-63.0> 6.1A-> 6.5G<7.38<>	FBC_DEBUG_ODT 6.5G< FBC_ODT 6.4G<	MICA_VREP 13.2F<13.4B MICA_VSYNC 13.1F<13.5D	PEX_TX2	
12VIN_5V 20.1B 20.1F<	FBACMD-7> 32G 33C 4.28 4.2D	FBAD-d9> 3.38 5.4D	8.38-0	FBC_PLLAVDD 6.4C 6.4G<	MIOBCAL_PD_VDDQ 13:28:13:2F<	PEX_TX3 2.1G-> 2.3C	
12VIN_FBVDDQ 19.1F< 19.2E 12VIN_NVVDD 20.1E 20.1F<	5.28.5.2D FBACMD -8> 3.2G.3.3C.4.18.4.1D	FBAD-60> 3.38.54D FBAD-61> 3.38.54D	FBCDct> 6.18.7.3C FBCDc2> 6.18.7.3C	FBVDDQ 19.2G FBVDD OK 19.4C	MIOBCAL_PU_GND 13:2B 13:2F<	PEX_TX3* 2.1G ÷ 2.3C PEX_TX4 2.1G ÷ 2.3C	
12V_PEX 2.5G	5.18.5.1D	FBAD-62> 3.38 5.4D	FBCD-3> 8.18 7.3C	FBVDD_PG 19.48	MIOBD<0> 13.1D 14.2B 17.1D 17.2B	PEX_TX4* 2.1G⇔2.3C	
6549LDO_FB 19.1F< 19.3D 6549LDO_GDR 19.1F< 19.3D	FBACMD 5.18.5.1D 5.18.5.1D	FBAD063> 3.38 5.40 FBAD0M-0> 3.38 4.38 4.4C	FBCD-4> 6.18 7.3C FBCD-4> 6.18 7.3C	FB_6549_RC 19.1F<19.3G FB_PHASE 19.1F<19.3E	MIOBDc11.0> 13.1E-> 13.1F-> 14.2A-> 17.1D->	PEX_TXS 2.1G ÷ 2.3C PEX_TXS* 2.1G ÷ 2.3C	
8549LDO_GDR_R 19.1F< 19.3D 8549LDO_GDR_R 19.1F< 19.3C	5.16.5.1D FBACMD<10> 3.2G 3.3C 4.2B 4.2D	FBADQMc7.0> 3.3A>3.4Fc 4.3Bc	FBCD-65 6.18.7.3C	FB_SNUB 19.1F< 19.3F	17.1Des MIOBD<1> 13.20 14.28 17.1D	PEX_TXS* 2.1G⇔ 2.3C PEX_TX8 2.1G⇔ 2.9C	
6549LDO_RC 19.1F< 19.3C	5.28 5.20	5.3Ac	FBCD<7> 6.18.7.4C	FSADJUST 14.38	17.2B	PEX_TX8* 2.1G⇔ 2.3C	
6549_F8_DIS 19.1F< 19.9C A2V5 18.1G	FBACMD<11> 3.3C 4.2B 4.2D 5.2B 5.2D	FBADOM<1> 3.38 4.38 4.4C FBADOM<2> 3.38 4.38 4.4E	FBCD-db 6.18 7.4C FBCD-db 6.18 7.4C	GND_SENSE 2.3F> 20.1F< 20.2G GPG3_CNTR 14.4A	MIOBD<2> 13.20 14.28 17.10 MIOBD<3> 13.20 14.28 17.10	PEX_TX7 2:1G-> 2:3C PEX_TX7* 2:1G-> 2:3C	
A3V3 18.1G	FBACMD<12> 3.9C 4.2B 4.2D 5.2B	FBADQM<3> 3.38 4.38 4.4E	FBCD<10> 6.18 7.4C	GPUPEXVDDIN 19.1Fc	MIOBD-4> 13.20 14.28 17.10	PEX_TX8 2.1G⇔2.4C	
A3V3_ADJ 18.1G< 18.2B AHB 9.3E	5.2D FBACMD<13> 3.1F.3.3C.5.1B.5.1D	FBADOM-4> 3.38.5.38.5.3C FBADOM-3> 3.38.5.48.5.4C	FBCD<13> 6.18.7.4C FBCD<12> 6.18.7.4C	GPU_PEX_REFCLK 2.1G⇔ GPU_PEX_REFCLK* 2.1G⇔	MIOBD-6> 13.20 14.28 17.10 MIOBD-6> 13.20 14.28 17.10	PEX_TX8* 2.1G ÷ 2.4C PEX_TX9 2.1G ÷ 2.4C	2
ALTADDR 14.3B	FBACMD-146 3.1G 3.3C 4.2B 4.2D	FBADQM-6> 3.38.5.3D.5.48	FBCD<13> 6.18.7.4C	HDMI_CEC 12.3E-> 16.2D->	MIOBD<7> 13.2D 14.2B 17.2D	PEX_TX9* 2.2G → 2.4C	
ATXC 11.2D	5.28.5.2D FBACMD<15:> 3.2G 3.3C 4.18 4.1D	FBADQM<7> 3.38 5.48 5.4D	FBCD<14> 6.18 7.4C	HDML_CEC_C 12.2G HDML_CEC_L 12.3F	MIOBD-8> 13.20 14.28 17.20	PEX_TX10 2.2G ⇔ 2.4C	
ATXC* 11.2D ATXD0 11.2D	FBACMD<15> 3.2G 3.3C 4.1B 4.1D 5.1B 5.1D	FBADQS<0> 33B 3.4G 4.4B 4.4C FBADQS<7.0> 3.3A<>3.4F<>4.4B<	FBCD<15> 8.18.7.4C FBCD<16> 8.18.7.3D	HDML_CEC_L 12.3F HDML_CEC_R 12.3F	17.38 MIOBD-9> 13.2D 14.2B 17.2D	PEX_TX10" 2.2G⇔ 2.4C PEX_TX11 2.2G⇔ 2.4C	
ATXD0* 11.2D	FBACMD<16> 3.1G 3.9C 4.2B 4.2D	5.4Ac	FBCD<17> 6.18.7.3D	HDML_HPD 12.1D> 16.2D<	17.38	PEX_TX11* 2.2G-> 2.4C	
ATXD1 11.2D ATXD1 11.2D	5.28.5.2D FBACMD<17> 3.1F.3.3C.4.28.4.2D	FBADQS<1> 3.38.3.4G 4.48.4.4C FBADQS<2> 3.38.3.4G 4.48.4.4E	FBCD<18> 6.18.7.3D FBCD<18> 6.18.7.3D	HDM_HPD_C 12.2G HDM HPD R 12.1E	MIOBD<10- 13:20 14:28 17:20 MIOBD<11- 13:20 14:28 17:20	PEX_TX12 2.2G⇔ 2.4C PEX_TX12* 2.2G⇔ 2.4C	
ATXD2 11.3D	5.28 5.20	FBADQS<3> 3.3B 3.4G 4.4B 4.4E	FBCD-20> 6.18.7.3D	HDML_IOVDD 18.1G	17.38	PEX_TX13 22G⇔ 25C	
ATXD2* 11:3D AVB 9:3E	FBACMD<18> 3.1F 3.3C 4.2B 4.2D 5.2B 5.2D	FBADQS-4> 3.38 3.4G 5.3C 5.4B FBADQS-5> 3.38 3.4G 5.4B 5.4C	FBCD<21> 6.18 7.3D FBCD<22> 6.28 7.4D	I2CA_SCL	MIOB_BLANK 14.3B MIOB_CLKIN 13.1F< 13.3E< 14.2A>	PEX_TX13* 2.2G-> 2.5C PEX_TX14 2.2G-> 2.5C	
BTXD4 11.3D BTXD4 11.3D	FBACMD<19> 3.2F 3.3C 4.2B 4.2D	FBADQS-65> 3.38.3.40.5.48 5.48	FBCD<23> 6.28 7.4D	12CA_SCL_T 9.2D	MIOB_CLKIN_G 13.1F<14.2As	PEX_TX14* 2.20-> 2.5C	
BTXD4* 11.3D	5.2B 5.2D	FBADQS<7> 3.48 3.4G 5.48 5.4D	FBCD-24> 6.28.7.4D	12CA_SDA 9.2D 9.3C	MIOB_CLKOUT 13.1F< 13.3E> 14.2A<	PEX_TX15 2.2G ⇔ 2.5C	
BTXD5 11.3D BTXD5* 11.3D	FBACMD<20> 3.20.3.3C 4.2B 4.2D 5.2B 5.2D	FBADQSN-05 3.48 3.47 4.48 4.4C FBADQSN-7.05 3.44-5 3.4F-5 4.48-5	FBCD-25: 6.28 7.4D FBCD-26: 6.28 7.4D	I2CA_SDA_C 9.2F> 9.2F> 11.9G< I2CA_SDA_T 9.2D	MIOB_CLKOUT_G 13.1F< 13.2D MIOB_HSYNC 13.1F< 13.2E> 14.2A<	PEX_TX15* 2.2G⇔ 2.5C PEX_TXX0 2.28.2.2G⇔	
BTXD8* 11.3D BTXD8 11.3D	FBACMD<21> 3.1F 3.3C 4.1B 4.1D	5.4Ac	FBCD<27> 6.28 7.4D	I2CB_SCL 10.4D	MIOB_VDDQ 13.1B 13.2G	PEX_TXX0° 2.28.2.29 ↔	
BTXD8* 11.3D CTXC 12.2D	5.2B 5.2D FBACMD<22> 3.2F 3.3C 4.1B 4.1D	FBADQSN:1> 3.4B 3.4G 4.4B 4.4C FBADQSN:2> 3.4B 3.4G 4.4B 4.4E	FBCD<28> 6.28.7.4D FBCD<29> 6.28.7.4D	I2CB_SCL_C 10.4G>12.2G 10.2G_SCL_T 10.4E	MIOB_VSYNC 13.1F< 13.2E> 14.3A< NODE_1 20.2F<	PEX_TXX1	
CTXC* 12.2D	FBACMD-23> 3.1G 3.3C 4.1B 4.1D	FBADQSN<3> 3.4B 3.4G 4.4B 4.4E	FBCD<30> 6.28 7.4D	12CB_SDA 10.4D	NVFAN 16.5G<	PEX_TXX2 22822G⇔	
CTXD0 12.2D CTXD0* 12.2D	5.28 5.2D FBACMD<24> 3.2G 3.3C 4.18 4.1D	FBADQSN-4> 3.48.3.49.5.3C.5.4B FBADQSN-5> 3.48.3.49.5.4C	FBCD<31> 6.28.7.4D FBCD<32> 6.28.8.3C	I2CB_SDA_C 10.3G>12.2G< I2CB_SDA_T 10.3E	NVVDD 20.2G NVVDDSENSE 20.1F< 20.3H	PEX_TXX2* 2.28.2.2G-> PEX_TXX3 2.2G-> 2.38	
CTXD1 12.2D	FBACMD-245 3.25 3.30 4.18 4.10 FBACMD-255 3.2F 3.30 4.18 4.10	FBADQSN-65 3.4B 3.4G 5.3D 5.4B	FBCD<33> 6.28 8.3C	12CC_SCL 16.2C	NVVDD_FB 20.1F< 20.4E	PEX_TXX3* 2.2G<> 2.3B	3
CTXD1* 12.2D	5.1B 5.1D	FBADQSN<7> 3.4B 3.4G 5.4B 5.4D	FBCD<34> 6.28 8.3C	I2CC_SCL_C 14.1G 14.2G	NVVDD_CK 20.4C	PEX_TXX4 22G-> 23B	
CTXD2 12:3D CTXD2* 12:2D	FBAD-db 3.18 4.3C FBAD-d3.0> 3.1A⇔ 3.4F< 4.3B⇔	FBA_DEBUG_ODT 3.4F< FBA_PLLAVDD 3.3F<3.4C	FBCD<35> 6.28.8.3C FBCD<36> 6.28.8.3C	I2CC_SCL_T 14.1E<14.3A<16.2D> I2CC_SDA 16.2C	NVVDD_PG 20.4C NVVDD_SENSE 2.3F> 20.1F< 20.2G<	PEX_TXX4* 2.2G⇔ 2.3B PEX_TXX5 2.2G⇔ 2.3B	
CX87X_VAA 14.1C	5.3Aco	FBCAL_PD 6.4G<6.5C	FBCD<37> 6.28 8.3C	I2CC_SDA_C 14.1G 14.2H	NV_8549_RC 20.1F< 20.3H	PEX_TXX5* 2.2G⇔ 2.3B	
CX87X_VDD 14.1C CX87X_VDDC 14.2D	FBAD<1> 3.18 4.3C FBAD<2> 3.18 4.3C	FBCAL_PU 6.4G<6.5C FBCAL_TERM 6.4G<6.5C	FBCD-386 8.28.8.3C FBCD-396 8.28.8.3C	I2CC_SDA_T 14.1E⇔ 14.3A⇔ 16.2D⇔	NV_BOOT 20.1F< 20.2E NV_COMP 20.1F< 20.4E	PEX_TXX6 2.2G⇔ 2.3B PEX_TXX6* 2.2G⇔ 2.3B	
CX25875_GPO0 14.38	FBAD-3> 3.18 4.3C	FBCCLK0 6.3G<6.4D>7.2B<	FBCD-40> 6.28 8.4C FBCD-41> 6.28 8.4C	I2CH_SCL 16.4B I2CH_SDA 16.4B	NV_LGATE 20.1F<20.3E	PEX_TXX7 2.2G⇔ 2.3B	
CX25875_GPO1 14.38 CX25875_GPO2 14.38	FBAD-do 3.18 4.3C FBAD-do 3.18 4.3C	7.20<7.50< FBCCLK0* 6.3G<6.4D>7.2B<	FBCD-41> 6.28 8.4C	I2CH_SDA 16.4B IFPABRSET 11.2B	NV_LGATE_AC 20.1F<	PEX_TXXY* 2.38 2.30 ⇔ PEX_TXX8 2.30 ⇔ 2.48	
CX_COMP 14.9C	FBAD-65 3.18 4.3C	7.20< 7.5E<	FBCD<42> 6.28.8.4C FBCD<43> 6.28.8.4C	IFPAB_IOVDD 11.1F<11.3B	NV_NV_RC 20.1F<20.4F NV_PHASE 20.1F<20.3E	PEX_TXX8* 2.30<> 2.48	
CX_PLL_COMP 14:3C CX_WRFF 14:9C	FBAD 3.18 4.4C	FBCCLK1 8.40> 8.4G< 8.2B<	FBCD-044-0 6.28.8.4C FBCD-045-0 6.28.8.4C	IFPAB_PLLVDD 11.1Fc 11.28	NV_PLLAVDD 2.4E.2.4G ↔	PEX_TXX9 2.30⇔ 2.48 PEX_TXX9 2.30⇔ 2.48	
CX_VREF 14.9C CX_XTL_IN 14.3B	FBAD<8b 3.18 4.4C FBAD<8b 3.18 4.4C	8.20< 8.50< FBCCLK1* 8.40> 8.46< 8.28<	FBCD-46> 6.28 8.4C	IFPCD PLLVDD 12.1Fc 12.2B	NV_SNUB 20.1F<20.9G NV_UGATE 20.1F<20.2E	PEX_TXX3° 2.3G<> 2.4B PEX_TXX10 2.3G<> 2.4B	
CX_XTL_OUT 14.38	FBAD<10> 3.18 4.4C	8.20< 8.5E<	FBCD-47> 6.28 8.4C		NV_UGATE_R 20.1F< 20.2F	PEX_TXX10" 2.3G⇔ 2.4B	
DACA_BLUE 9.1A< 9.5D DACA_BLUE_C 9.1A< 9.4F> 11.9G<	FBAD<11> 3.18 4.4C FBAD<12> 3.18 4.4C	FBCCMD-05	FBCD-48> 8.28 8.3E FBCD-49> 8.28 8.3E	IFPC_IOVDD 12.1F<12.38 IFPC_IOVDD_ADJ 18.4G	PEX.1V2 12.2G PEX.1T_TDNO 2.1B	PEX_TXX11 2.3G⇔ 2.4B PEX_TXX111 2.3G⇔ 2.4B	
DACA GREEN 9.1A< 9.4D	FBAD<13> 3.18 4.4C	8.1As	FBCD-50> 6.28.8.3E	IFPD IOVDD 12.1F< 12.3C	PEX PLL VDD 2.4E 2.4Ge>	PEX TXX12 2.30-> 2.48	
DACA_GREEN_C 2.1A<2.4F>11.3G< DACA_HSYNC 2.3C	FBAD<14> 3.18 4.4C	FBCCMD<1> 6.1F 6.3C 7.1B 7.1E	FBCD<51> 6.28 8.3E	IFP_IO_EN 18.4C	PEX_REFCLK 2.1G ~ 2.2B PEX_REFCLK 2.1G ~ 2.2B	PEX_TXX12* 2.3G⇔ 2.48 PEX_TXX13 2.3G⇔ 2.58	
DACA_HSYNC_BUF 9.3E	FBAD<15> 3.18 4.4C FBAD<16> 3.18 4.3E	8.18.8.1E FBCCMD<2> 6.1F.6.3C.7.1B.7.1E	FBCD-52> 6.38 8.3E FBCD-53> 6.38 8.3E	IFP_IO_OK 18.4D ISL6540_FREQ 20.3D	PEX_REPCIX* 2.1G→ 2.2B PEX_RST* 2.2B	PEX_TXX13* 2.3G⇔ 2.5B	
DACA_HSYNC_C 9:3F> 9:3F> 11:3G<	FBAD<17> 3.18 4.3E	FBCCMD<3> 6.2F 6.3C 7.1B 7.1E	FBCD-54> 6.38 8.3E	JTAG_TCLK 16.2A	PEX_RX0 228 23G↔	PEX_TXX14 2.9G<> 2.5B	
DACA_RED 2.1A<2.4D DACA_RED_C 2.1A<2.4F> 11.3G<	FBAD<18> 3.18 4.3E FBAD<19> 3.18 4.3E	8.18 8.1E FBCCMD-04> 6.1G 6.3C 8.1B 8.1D	FBCD-d55	JTAG_TDI 16:2A 16:2A JTAG_TDO 16:2A 16:2A	PEX_RXIP 2.28 2.3G⇔ PEX_RX1 2.28 2.3G⇔	PEX_TXX14* 2.3G⇔ 2.5B PEX_TXX15 2.3G⇔ 2.5B	1
DACA_RSET 9.38	FBAD<20> 3.18 4.3E	FBCCMD-6> 6.1G 6.3C 8.1B 8.1D	FBCD-57> 6.38 8.4E	JTAG TMS 16:2A 16:2A	PEX_RX1* 2.28 2.3Gc>	PEX_TXX15* 2:3G⇔ 2:58	
DACA_VDD 9.1Aco 9.3B DACA_VREF 9.3B	FBAD<21> 3.18 4.3E FBAD<22> 3.18 4.3E	FBCCMD-6> 6.1H 6.3C 8.1B 8.1D FBCCMD-7> 6.2H 6.3C 7.2B 7.2E	FBCD-58> 6.38 8.4E FBCD-59> 6.38 8.4E	JTAQ_TRST* 16.2A LOAD_CVBSY 14.4E	PEX_RX2 2.28.2.3G⇔ PEX_RX2* 2.38.2.3G⇔	PLLVDD 15.2E PLL_VDD 15.5Fc	
DACA_VSYNC 9.3C	FBAD<23> 3.28 4.4E	8.28 8.2E	FBCD-60> 6.38 8.4E	LOAD_G 14.4E	PEX_RX3 238.23G->	PRSNT 2.1A 2.4A	
DACA_VSYNC_BUF 9.3E DACA_VSYNC_C 9.3F> 9.3F> 11.3G<	FBAD-25> 3.28 4.4E FBAD-25> 3.28 4.4E	FBCCMD<8> 6.1H 6.3C 7.1B 7.1E 8.1B 8.1E	FBCD<61> 6.3B 8.4E FBCD<62> 6.3B 8.4E	MEM_BOOT 12.1F< 12.3E MEM_COMP 12.1F< 12.3E	PEX_RX3* 2.38.2.3G c- PEX_RX4 2.38.2.3G c-	REG_IN 14.2C REG_OUT 14.2C	
DACB_PB_CVBS 10.2E>14.4B<	FBAD<28> 3.28 4.4E	FBCCMD-sb 6.1F 6.3C 7.1B 7.1E	FBCD-63> 6.38 8.4E	MEM_FB 19.1F< 19.3E	PEX_RX4* 2.38 2.3G⇔	RESET_BUF* 14.3A< 16.4C>	
DACB_PR_C 10.2E> 14.4Bc DACB_RSET 10.1Ac 10.2C	FBAD-27> 3.28 4.4E FBAD-28> 3.28 4.4E	8.18 8.1E FBCCMD-10> 6.2F 6.3C 7.2B 7.2E	FBCDOM<0> 6.38 7.46 7.4C FBCDOM<7.0> 6.30> 6.40< 7.48<	MEM_FB_RC 12.4F MEM_LGATE 12.1F<12.3E	PEX_RX5	ROMCS* 16.3F<>16.4C> ROM_SCLK 16.3F<>16.4C>	
DACB_RSET 10.1A< 10.2C DACB_VDD 10.1A< 10.2C	FBAD-29> 3.28 4.4E FBAD-29> 3.28 4.4E	8.2B 8.2E	8.38c	MEM_LGATE 19.1F< 19.3E MEM_PVCCS 19.1F< 19.2E	PEX_RXS* 2.38 2.4G ⇔ PEX_RXS 2.38 2.4G ⇔	ROM_SCLK 16.3F⇔ 16.4C> ROM_SI 16.3F⇔ 16.4C>	
DACB_VREF 10.1Ac 10.2C	FBAD-030> 3.28 4.4E FBAD-031> 3.28 4.4E	FBCCMD<11> 6:3C 7:2B 7:2E 8:2B 8:2F	FBCDQM<1> 6:38 7:48 7:40	MEM_UGATE 12.1F<12.3E MEM_UGATE_R 12.1F<12.3E	PEX_RXF 238.24G PEX_RXF 238.24G PEX_RXF 238.24G PEX_RXF 238.24G PEX_RXF PEX_RX	ROM_SO 16.3F⇔ 16.4C> SCART CNTR1 14.4A	
DACE_V_L 10.2E>.14.48< DACC_VDD 10.4C	FBAD<31> 3.28 4.4E FBAD<32> 3.28 5.3C	8.2E FBCCMD<12> 6.9C 7.2B 7.2E 8.2B	FBCDOM-25 6.38 7.48 7.4D FBCDOM-35 6.38 7.48 7.4D	MEM_UGATE_R 19.1F< 19.3E MEM_VCCS 19.1F< 19.2D	PEX_RX7 2.3B.2.4G⇔ PEX_RX7* 2.4B.2.4G⇔	SCART_CNTR1 14.4A SCART_CNTR2 14.5A	
DDC_5V 18.1G	FBAD<33> 3.28 5.3C	8.2E	FBCDQM-4> 6.38 8.38 8.3C	MIGACAL_PD_VDDQ 13:2F< 13:4B	PEX_RX8	SCART_CNTR3 14.4B	
DVLSOUTH_HPD 11.5D> 16.2D< DVLSOUTH_HPD_C 11.3F	FBAD<35> 3.28 5.3C FBAD<35> 3.28 5.3C	FBCCMD<13> 6.1F 6.3C 8.1B 8.1D FBCCMD<14> 6.2F 6.3C 7.2B 7.2E	FBCDOM-65- 6.38 6.48 8.4C FBCDOM-65- 6.38 6.3E 8.4B	MOACAL_PU_GND 13.2F< 13.4B MOAD d> 13.4D 13.4G 17.1C	PEX_RX8* 2.4B 2.4G PEX_RX9 2.4B 2.4G	SCART_CNTR4 14.5B SCART_RGB 14.4B	
DVI_SOUTH_HPD_R 11.5E	FBAD<38> 3.28 5.3C	8.28 8.2E	FBCDQM-7> 6.38 8.48 8.4E	17.48	PEX_RX0* 2.48 2.4G->	SCART_RGB_C 14.5G	
FAN_C 16.1G 16.5G c FAN_PWM 16.2C	FBAD<37> 3.28 5.3C FBAD<38> 3.28 5.3C	FBCCMD<15> 6.2G 6.3C 7.18 7.1E 8.18 8.1E	FBCDQS-05 6:38 6:4G 7:4B 7:4C	M0ADc11.0b 13.1Fc13.3Ho 17.1Bo	PEX_RX10	SCART_ROB_R 14.5C	
FAN_PWM_4PIN 18.2G	FBAD<39> 3.28 5.3C	FBCCMD<16> 6.1G 6.3C 7.2B 7.2E	FBCDQS<70> 6.3A<>-6.4F<->-7.4B<- 8.4B<-	MIDAD<1> 13.4D 13.4G 17.1C	PEX_RX11 2.48 2.4Gc>	SCART_VID_C 14.5G SCART_VID_CNTR 14.5C	
FBACLK0 3.3D> 3.3F< 4.2A<	FBAD<40> 3.28 5.4C	8.29 8.2E	FBCDQS<1> 6.38 6.4G 7.4B 7.4C	17.28	PEX_RX11* 2.4B 2.4Ge>	SCART_VID_CNTR_R 14.5C	5
						A Micro-Star Internation	nal Co., LTD.
ALL MAINA DESIGN SPECIFICATIONS REFERENCE SPECIFICATIONS DECEDEN	NCE ROARDS. FILES DRAWINGS DIAGNOSTICS LISTS AND OTHER DOCUMENTS OR IN	FORMATION (TOGETHER AND SEPARATE) Y MATERIAI S) ARE BEING DOCUMEN AS	ASSEMBLY G73 ALL COMPONENT BO PAGE DETAIL det here to insert page deta IS* THE MATERIALS MAY			MSI V058 Size Document Number	Rev
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IMPLIED WARRANTIES INCLUDING, WITHOUT LIMITATION, THE WARRANTIES OF	F DESIGN, OF NONINFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR B		CTICE, OR INDUSTRY STANDARDS.		-	Date: Tuesday, August 22, 2006	Sheet 21 of 23
A	В	С	ט	E	r	Н	



Cred Part	C506 [3:30] C507 [3:3F]	C602 [2.4C] C603 [3.1E]	C698 [11.38] C699 [2.9C]	C794 [18.2C] C795 [7.2G]	J1 (9.4G) J2 (12.2H)	Q507 [18.4D] Q506 [20.4C]	R518 [19.3G]	RPS [62F62G62G
design	C508 (3.3G)	C803 [3.1E] C804 [8.9G]	C699 [2.3C] C700 [15.3E]	C795 [7:26] C796 [2:20]	J3 [14.2H]	Q509 (20.4C)	R519 [19.3G] R520 [19.4B]	6.2F] RP4 (8.2H 6.2F
design Jun 9	C509 [3.3G]	C605 [8.3G]	C700 [15.5E] C701 [9.3B] C702 [13.4A]	C797 12.2C1	J4 (143H)	Q810 [12.3F]	R521 [19.48]	6.2FI
6 2006	C509 (3.90) C510 (3.9F)	C606 [2.4C]	C702 [13.4A]	C798 [18.4H]	J4 [143H] J5 [113H]	Q510 [12:3F] R1 [14:2F]	R522 [19.4C]	RP5 (62G 62G 62H
	C511 [3.3F] C512 [3.3G]	C607 [3.2D] C606 [8.3G]	C703 [8:3G] C704 [12:38]	C799 [19.38] C800 [19.38]	JB [16.4F] J7 [14.4H]	R2 [10.3E] R3 [10.4F]	R523 [19.2C] R524 [8.5E]	6.2H] RP6 (6.2H 6.2H 6.2F
[17:2F]	C513 [19.3F]	C609 [3.1D]	C705 [8:3G]	C801 [19.38]	JB [16.1H]	R4 [10.4F]	R525 (8:20)	6.2F]
12.2G] 18.4B]	C514 [4.2H] C515 [19.2F]	C610 [8.9G] C611 [2.4C]	C705 [8.3G] C706 [11.38] C707 [2.3F]	C802 [19.38]	J9 [16.1H] J10 [16.2A]	R5 (9.2E) R6 (9.2E)	R526 [8:3D] R527 [16:4C]	RP7 [6.1H 6.1F 6.1F
18.48)	C515 [19.2F]	C611 [2.4C]	C707 [2:3F]	C803 [18.4G]	J10 [16.2A]	R6 [0.2E]	R527 [16.4C]	6.1H] RP6 [6.2H 6.1G 6.1G
[9.2F] [9.2F]	C516 [4.3H] C517 [5.3G]	C612 [3.1E] C613 [8.3H]	C708 [2.4F] C709 [2.4F]	C804 [16.2A] C805 [20.5E]	J11 [16.1A] L1 [14.2F]	R7 [14.3F] R8 [14.2F]	R528 (6.5D) R529 (6.5D)	6.2H
19.3F	C518 (5.20)	C614 [2.4F]	C710 [9.3A] C711 [9.3A] C712 [9.5E] C713 [9.5.86] C714 [91.38]	C806 [20.5G]	12 (14.98)	R9 [12.1D]	R530 (6.5D)	RP9 [62G 62G 62F
[9.3F] [10.4F]	C519 [5.30] C520 [4.20] C521 [19.2E] C522 [5.10]	C615 [8.3F]	C711 [9:3A]	C807 [20.5F]	L3 [8.3E] L4 [8.3E] L5 [14.2F] L6 [14.3F]	R10 [10.4E] R11 [9.20]	R531 [6:3D]	6.2F
[10.4F]	C520 [4.2G]	Cese (3.1D)	C712 [6.5E]	C808 [20.5F]	L4 [9.3E]	R11 [9.20]	R532 [9.4C]	RP10 [62G 62G 62G
[10.4F] [12.1E]	C521 [19.26] C522 [5.1G]	C617 [3.1E] C618 [3.20]	C713 [13.48] C714 [11.38]	C809 [20.5E] C810 [20.5E]	LS [14.2F] L6 [14.3F]	R12 [9.20] R13 [12.10]	R533 (2.4D) R534 (8.3E)	6.20] RP11 [8.1G.8.1G.8.1G
[14.3G]	C523 [19.4G]	C619 [2.3F]	C715 (2.3F)	C811 [20.5E]	L7 [14.5F] L8 [20.1D] L9 [20.3G]	R14 [14.3E]	R535 [9.9C]	6.1G
[14.2G] [14.1G]	C524 [4.10] C525 [5.2F]	C620 [6.3H]	C716 [15.3E] C717 [15.2E]	C812 [20.5G]	L8 [20.1D]	R15 [9.3E]	R536 [10.2C]	RP12 [8.2G 8.1H 8.1H
[14.10]	C525 [5:2F]	C821 [2.1F]	C717 [15.2E]	C813 [2.1C]	L9 [20.3G]	R16 [14.4A]	R537 [10.2C]	6.2G RP13 [3.2G.3.1F.3.1F
[14.1G] [14.2G]	C526 [5.3G] C527 [4.3G]	C622 [3.20] C623 [3.1E]	C718 (12.38) C719 (11.38)	C814 [2.1C] C815 [2.1C]	L10 [19.2E] L11 [19.3G]	R17 (14.4E) R18 (9.3E)	R538 [10.4C] R530 [8.38]	3.20]
14.2F	C528 [4:2G]	C624 [3.4D]	C720 [11.38] C721 [13.48]	C816 [18.2A]	L501 [14.4F]	R19 [16.4F]	R540 [9.38]	RP14 [3.2G 3.1G 3.2G
[11.2G] [14.2F]	C529 [19.20] C530 [19.46]	CR25 13:201	C721 [13.48]	C817 [20.3H]	L902 [14.4F] L903 [9.5E]	R20 [14.2D]	R541 [10.2E]	3.10
[14.2F]	C530 [19.4G] C531 [4.3E]	C626 [8.3H] C627 [2.1E]	C722 [10.28] C723 [10.28]	C818 [20.2C] C819 [20.2D]	L503 [9.5E] L504 [9.4E]	R21 [11.5E] R22 [11.5E]	R542 [11.3C] R543 [10.2E]	RP15 (3:2G 3:2F 3:2G 3:2F]
14.3F	C532 [5.3F]	C628 [2.4C]	C724 [8.3H]	C820 [20.2E]	L505 (2.4E)	R23 [14.4A]	R544 [10.2E]	32F) RP16 [3.1F 3.2H 3.2H
14.2FI	C533 [5.3C]	C629 [2.2F]	C724 [6.3H] C725 [13.4B]	C821 [20.4E]	L505 [9.4E] LB1 [14.1F]	R24 [14.3A]	R545 [12.3C]	3.25
14.2F] 18.4A]	C534 [4:3C] C535 [4:1G]	C630 [2.2F]	C728 [2:30] C727 [2:30]	C822 [20.4F]	LB2 [14.1F] LB3 [10.4F]	R25 [14.4B]	R546 [16.4C]	RP17 [3.2H 3.2G 3.2G
18.4A) 14.2E)	C535 [4.1G] C536 [5.3H]	C631 [2.2E] C632 [3.4D]	C727 [2:3C] C728 [7:3G]	C823 [14.2C] C824 [20.2E]	LB3 [10.4F] LB4 [10.3F]	R26 [14.58] R27 [14.5A]	R547 [13.5E] R548 [12.3C]	3.2H] RP18 (3.2F.3.2F.3.1H
9.5G)	C537 [19.3E]	C633 [3.4D]	C729 [13.2A]	C825 [16.5F]	LB5 [12.1E]	R28 [14.4B]	R549 [14.5D]	3.2H
18.201	C598 (5.10)	C634 [2:3E]	C730 [7.3G]	C826 [20.28]	LB6 (9.2E)	R29 [14.3F]	R550 [16.4E]	RP19 (3.1H.3.1F.3.1H
[14.20] [11.5F]	C539 [4.2H]	C635 [3.20] C636 [2.40] C637 [2.18]	C731 [2,3C]	C827 [14.1D]	LB7 [2.2E] LB8 [18.4B] LB9 [14.2D]	R30 [14.5F]	R551 [7.3D]	3.1F
11.5F] 14.3C]	C540 [4.1H]	C636 [2.4C]	C732 [7.3G] C733 [13.28]	C828 [14.1D] C829 [20.2B]	LBS [18.4B]	R31 [14.3A] R32 [14.5C]	R552 [7:20] R553 [16:4E]	RP20 (3.1G.3.1G.3.2H 3.2H)
14.20]	CS39 [4.2H] C540 [4.1H] C541 [5.1H] C542 [5.3F]	C638 [2.1F]	C734 [7.3G]	C830 [14.4F]		R33 [14.4A]	R553 [16.4E] R554 [16.4C]	32H) RP21 (32F 32G 32F
14.20]		C639 [6:3F]	C735 (6.3G)	C831 [14.4F]	LB11 [14.5G]	R34 [20.2C]	R555 [14.5D]	3.20
20.20]	C544 [4.2G]	C640 [2.2E] C641 [3.2D]	C736 [12.38] C737 [7.3F]	C832 [14.4F]	LB12 [14.5G]	R35 [14.4B]	R556 [16.3G]	RP22 [3:1G:3:2G:3:2G
20.2F] 14.2D]	C545 [5.30]	C641 [3.20] C642 [2.3F]	C737 [7:3F] C738 [11:3A]	C833 [14.4F] C834 [20.2B]	LB13 [2:3G] LB14 [12:3A]	R36 [20.3G] R37 [16.1F]	R557 [7:50] R558 [13:30]	3.2G RP23 [3.1H.3.1H.3.1G
16.4E)	C544 [4:20] C545 [5:30] C546 [4:2H] C547 [4:20]	C643 [2.2F]		C835 [14.2C]	LB501 [3.4E]	R38 [16:2F]	R559 [14.28]	3.26
20.1F]	C548 [5.1G]	C844 [2.1F]	C740 [7.3H]	C836 [14.4G]	LB502 [2.4G]	R20 [16.1H]	R580 [18.4D]	RP24 [3.1G.3.1G.3.1G
14.2C)	C549 [4.2G] C550 [5.1F] C551 [19.4G]	C645 [8:3G] C646 [8:3G] C647 [8:3G]	C740 [7.3H] C741 [19.4G] C742 [2.3C] C743 [8.3G]	C837 [14.4G]	LB503 [2.4E]	R40 [16:2A]	R561 [18.4C]	3.1G
[14.9G] [14.9G]	C550 [5.1F]	C646 [8.9G]	C742 [2:3C] C743 [8:3G]	C838 [14.1C] C839 [14.1C]	LB504 [11.3A] LB505 [6.5E]	R41 [16.2A] R42 [18.4G]	R562 [18.4C] R563 [2.18]	TP1 [20.44] TP2 [20.40]
[14.5H]	C552 [5:30]	C648 [3.4E]	C744 [15.2E]	C840 [18.28]	LB506 [10.28]	R43 [16.2A]	R564 [17.48]	TP3 [20.3H]
14.5H] 20.2A]	C562 [5.3G] C563 [4.1G]	C849 [2:2F]	C745 [10.28]	C841 [14.48]	LB507 [13.1A]	R44 [16.2A]	R565 [20.2H]	TP501 (19.4G)
14.3F] 14.3F]	C554 [4:30] C555 [4:30] C556 [5:30]	C650 [2.1F] C651 [2.4C]	C746 (13.2A) C747 (2.3A)	C842 [14.4A] C843 [18.2A]	LB508 [9.3A]	R45 [18.4G]	R588 (17.48) R587 (20.3H)	TP902 [19.4H] TP903 [3.4D]
14.3F]	C555 [4.20]	C651 [2.4C] C652 [2.4G]	C747 [9:3A]	C843 [18.2A] C844 [2.5E]	LB509 (12:38) LB510 (12:28)	R46 [16.2A] R47 [17.3B]	R567 [20.3H] R568 [17.2B]	TP903 [3.4D] TP904 [20.2H]
14.5F)	C557 [5.1G]	C653 [8.9G]	C748 [6.5E] C749 [10.28]	C845 [9.4E]	LB510 [12.28] LB511 [11.2A]	R48 [17.38]	R569 [20.3H]	TP505 [6.4D]
(14.5F) (14.5F) (14.5H)	C558 [19.4F]	C654 [2:3F]	C750 [7.3G]	C846 (9.4E)	LB512 [13.3A]	R49 [17.3C]	R570 (17.38)	U1 [18.28]
[14.20] [14.30]	C589 [20.2E] C580 [4.1G] C581 [4.1H]	C655 [8.5F] C658 [2.2E] C657 [8.2G]	C751 [7.3G] C752 [7.3G]	C847 [18.28] C848 [9.3E]	LB513 [15.3D]	R50 [17.28] R51 [17.28]	R571 [20.3H] R572 [17.3B]	U2 [18.40]
[14.9C] [14.1D]	C560 [4.1G]	C656 [2.2E]	C752 [7:3G] C753 [7:3H]	C848 [2.3E] C849 [18.2B]	LB514 [15.2D] LB515 [14.1D]	R51 (17.28) R52 (14.4D)	R572 [17.38] R573 [20.2C]	U601 (19.3D) U602 (18.2D)
[14.10] [20.2A]	C581 [4.1H] C582 [5.2G]	C658 (2.4C)	C754 (2.3C)	C850 [14.5E]	LB515 [14.1D] LB516 [12.3G]	R53 [16:3D]	R574 (20.3C)	U503 [16.3C]
[20.2A] [14.1D]	C562 [5.2G] C563 [4.2G]	C859 (3.1D)	C755 (6.3H)	C851 (9.5E)	LB517 [14.5E]	R54 [17.28]	R575 (20.4H)	U504 [16.3G]
[20.1E] [20.1E]	C584 [5.3F] C585 [5.3G] C586 [19.4F]	C660 [3.20] C661 [2.1E]	C756 [2.3C] C757 [13.48]	C852 [9.4E] C853 [9.4E]	M1 [7.2C 7.4E	R55 [17.38]	R576 [20.4F] R577 [20.2D]	U505 [20.3D]
[20.1E]	C585 [5.2G]	C861 [2.1E] C862 [3.2D]	C757 [13.48] C758 [13.4C]	C853 [9.4E] C854 [14.5E]	7.3C) M2 [7.2E 7.4E	R56 [17:38]	R577 [20.2D]	U506 (14.3E) U507 (14.3E 14.4E
[20.1D] [20.9G]	C567 [5.3G]	C663 12.2FI	C759 [15.3E]	C855 [19.3E]	7.4Cl	R57 [17.28] R58 [16.30]	R578 [20.2C] R579 [20.3E]	US07 [14.3E 14.4E 14.5D 14.4E
(20.3E)	C568 [4.3G]	C884 (2.1F)	C760 [15.2E]	CN1 [13.4F]	M3 [8.3E 8.4E	R59 [16:2D]	R580 (20.3D)	143E)
[16.1G] [16.1G]	C569 [19.9C] C570 [19.4E]	C665 [2.4F] C686 [2.2F]	C761 (12.38) C762 (12.38)	CN2 [2.38] D1 [14.2F]	8.2EI	R60 [15.3E] R61 [15.3G]	R581 [14.3A] R582 [14.4C]	U508 (9:3D 9:5B
16.1G	C570 [19.4E]	C666 [2.2F]	C762 [12.38]	D1 [14:2F]	M4 (8.3D 8.2C	R61 [15.3G]	R982 [14.4C]	9.4B)
20.1A] 2.1A]	C571 [19.3G] C572 [19.28]	C667 [2.2F] C668 [6.3H]	C763 [6.3G] C764 [12.3A]	D2 [12:10] D3 [14:1F]	8.4D) M5 [4.2E.4.4E	R62 [13.48] R63 [13.48]	R583 [14.3D] R584 [20.4C]	Y1 [15.3F] Y301 [14.3A]
2.1A	C573 [2:50]	CM0 12 NF	C295 [11 38]	D4 [2:3E]	4.3EI	R64 (13.48)	B585 [14.4C]	
2.1A 20.18 18.4F	C574 [8.1G] C575 [8.3C]	C670 [2.4C] C671 [3.2E]	C766 (18.4E) C767 (13.4A)	D4 (0.3E) D5 (0.3E) D6 (14.3F)	M6 [42B 43D	R65 (13.48) R66 (13.28)	R586 [14.3D] R587 [16.4F]	
18.4F]	C575 [8:3C]	C671 [3.2E]	C767 [13.4A]	D6 [14.3F]	4.4D)	R66 [13.28]	R587 [16.4F]	
2.3A) 2.3A)	C576 [2.5C] C577 [8.1H]	C672 [2.4F] C673 [2.5F]	C768 [2.3C] C769 [18.4E]	D7 [14.2F] D8 [14.1F]	M7 (5.3E 5.2E 5.3C)	R67 [16.2D] R68 [13.28]	R588 [14.4F] R589 [14.4F]	
141	C578 (8.20)	C874 12 NFI	C770 [2:3C]	D0 (11.4F)	M8 (5.4E 5.4C	Beg [16.2C]	R500 (14.4C)	
0.5H]	C579 [8.1G] C580 [2.5C]	C675 [2.4C] C676 [7.2G]	C770 [2:3C] C771 [11:3A] C772 [12:3A]	D10 (14.3F) D11 (14.5F)	5.20	R70 [16.2C] R71 [2.2C]	R591 (14.3D) R592 (14.3D)	
0.5H)	C580 [2.5C]	Cere [7.2G]	C772 [12.3A]	D11 [14.5F]	MEC1 [17:3F]	R71 [2.2C]	R502 [14.3D]	
1.1A) 18.4F)	C581 (8.1H) C582 (3.2D)	C677 [3.26] C678 [2.27]	C773 [7.1G] C774 [7.1G]	D12 [18.4F] D13 [20.3G]	MEC2 [17:2F] MEC3 [17:2F]	R72 [14.38] R73 [14.38]	R593 [20.4C] R594 [20.4C]	
2.1A 18.4F 18.2E	C583 [2:5C]	C879 12.4FI	C275 [15:30]	D14 (16.1G)	MEC4 [17.2G]	R74 (16.5F)	R505 [14.20]	
10.5F] 10.5G]	C584 (8.2G) C585 (3.2D)	C680 [2.4F] C681 [2.5F]	C776 (15.20) C777 (7.10)	D15 [18.4G] D16 [16.5E]	MEC5 [17:3G]	R75 [16.4E] R501 [19.3F]	R596 [14.3A] R597 [18.2B]	
0.50]	C585 [3.2D]	C681 [2.5F]	C777 [7.1G]	D16 [16.5E]	Q1 [14.4A]	R501 [19.3F]	R507 [18.28]	
18.2E) 18.4H)	C586 [8.2G] C587 [8.1G]	C682 [2.9F] C683 [11.38]	C778 [7.1G] C779 [2.2C]	D501 [19.3F] D502 [20.18]	Q2 (14.20) Q3 (14.58)	R502 (19.3E) R503 (19.2D)	R198 [14.4E] R199 [18.2B]	
(0.5D)	C588 [8.10]	C684 [3.1D]	C780 [7.3C]	D503 [14.4F]	0.4 (00.00)	R504 [3.3E]	R600 [14.4E]	
20.50]	C588 (8.1G) C589 (2.5C)	C685 [6.3F]	C781 (2.2C)	D504 [14.4F]	QS [20.2F] QS [14.48] Q7 [14.48] Q8 [20.2C] Q9 [20.3F]	R505 [3.3D]	R601 [9.5D]	
0.5F] .4F]	C500 [2.5C] C501 [2.1F] C502 [2.1F]	C686 [7.3G]	C782 [15.5F] C783 [15.5G] C784 [7.1H]	D507 [12.3F] F1 [18.4B] G1 [2.3D]	Q6 [14.48]	R506 [4.5D]	R602 [9.4D]	
2.4F] 13.4BI	C501 [2.1F] C502 [2.1F]	C687 [2.2F] C688 [11.3B]	C783 [15.9G] C784 [7.1H]	F1 [18.4B] G1 [2.3D]	Q7 [14.48] Q8 [20.2C]	R507 [5.2C] R508 [5.3C]	R903 [9.4D] R904 [14.3E]	
13.48) 19.2E)	C593 [2.1G]	C689 [2.2F]	C785 [18.2E]	G1 (3:3C)	Q9 [20.3F]	R509 [4:2C]	R605 [14.3E]	
19.28)	C594 [3.2D]	C690 [2.2F]	C786 [18.2D]	G1 [6.3C]	Q10 [20.3F]	R510 [4.3C]	R606 [12.3F]	
9.4H] 9.2F]	C505 [3.1D] C506 [3.1D] C507 [3.1D]	Cent (3.95)	C787 [16.36] C788 [2.2C] C789 [7.2G]		O11 [16.1G] O501 [19.3E] O502 [19.3E]	R511 (5.5D)	R607 [12:3F]	
19.2F] 3.3H]	C596 (3.1D) C597 (3.1D)	C692 (6.5D) C693 (12.3B)	C788 [2.20]	G1 [10.4D 10.2D] G1 [11.3C]	Q501 [19.3E] Q502 [19.3E]	R512 [12.3D] R513 [12.4F]	Rese (14.3G) Rese (14.3H)	
[3.3H]	C598 [3.1E]	C894 [2.9C]	C790 [2.2C]	G1 [12.3C]	Q503 [19.4C]	R514 [19.3C]	RP1 [6:1G 6:2G 6:1G	
3.3H	C598 [3.1E] C599 [3.2E]	C695 [2.9F]	C791 [7.2G]	G1 [13.2C 13.4C]	Q504 [19.4C]	R515 [19.3C]	6.2G)	
[3.3H] [3.9G]	C600 [2.4C] C601 [3.1D]	C696 (3.1E)	C792 [7.1H] C793 [18.2E]	G1 [15.2F 15.3B]	Q505 [19.2C]	R516 [19.20]	RP2 [6:2G 6:2G 6:1F	
3.30]	C601 [X10]	C697 [8.5E]	C793 [18.2k]	G1 [16.28 16.48]	Q506 [18.4D]	R517 [19.3G]	6.1F]	
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