

P815-D00: G96 MXM V3.0
128/256MB 128-BIT GDDR3
LVDS, QUAD DP

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SKU	VARIANT	NVPN	ASSEMBLY
B	BASE	600-10815-base-300	BASE LEVEL GENERIC SCHEMATIC ONLY. COMMON & NO_STUFF ASSEMBLY NOTES AND BOM NOT FINAL.
1	SKU0000	600-10815-0000-300	GRAM 128bit GDDR3 MXM V3.0
2	SKU0001	600-10815-0001-300	P815-D00 SKU1 G96-600 MXM3.0 TYPE-B 512MB 4pcs 32Mx32
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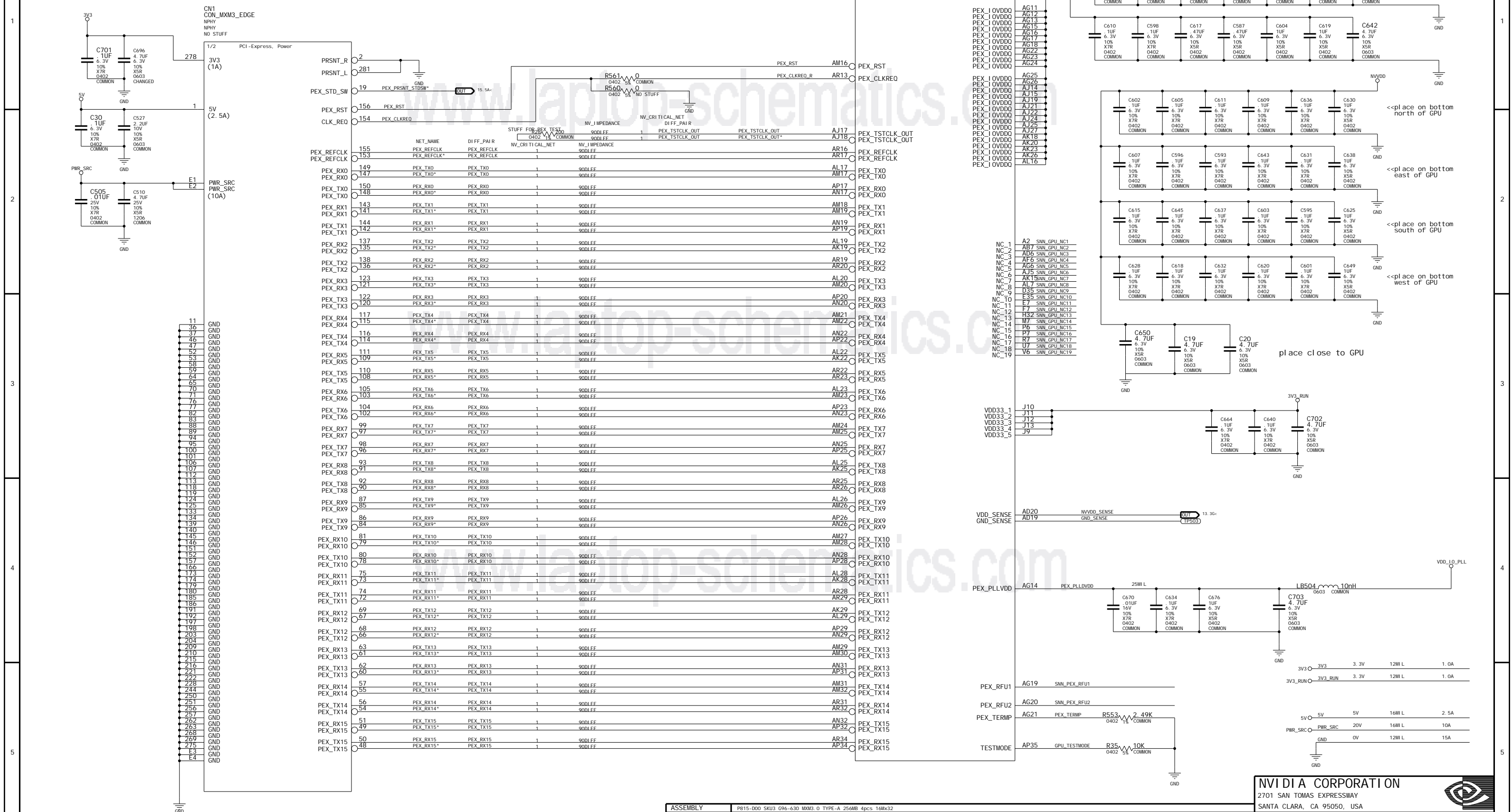
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PAGE 2) MXM-11 GOLDEN EDGE, PCI EXPRESS INTERFACE

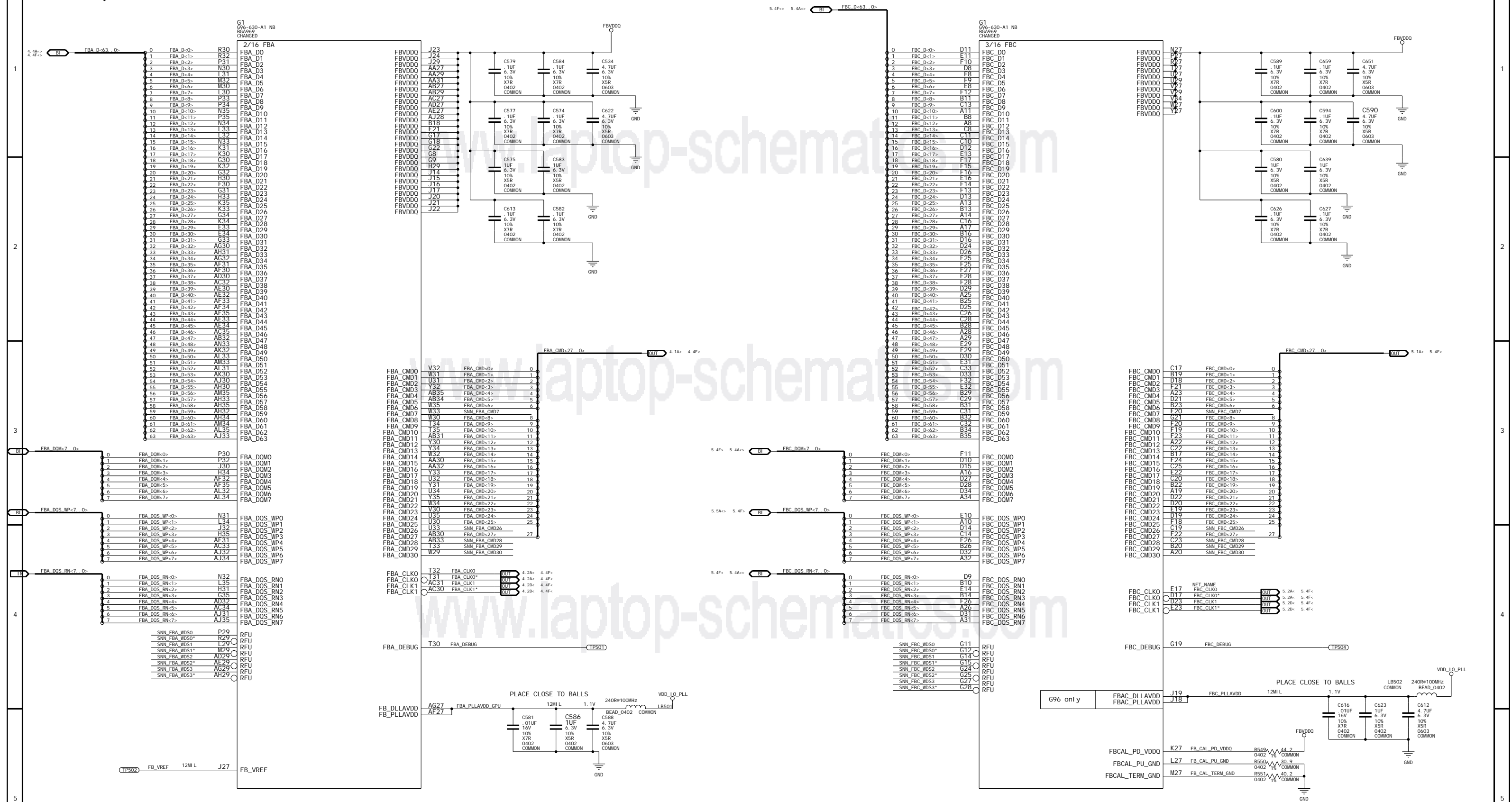


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ASSEMBLY	P815-D00 SKU3 G96-630 MXM3.0 TYPE-A 256MB 4pcs 16Mx32
PAGE DETAIL	PCI EXPRESS Interface

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PAGE 3) GPU MEMORY INTERFACE



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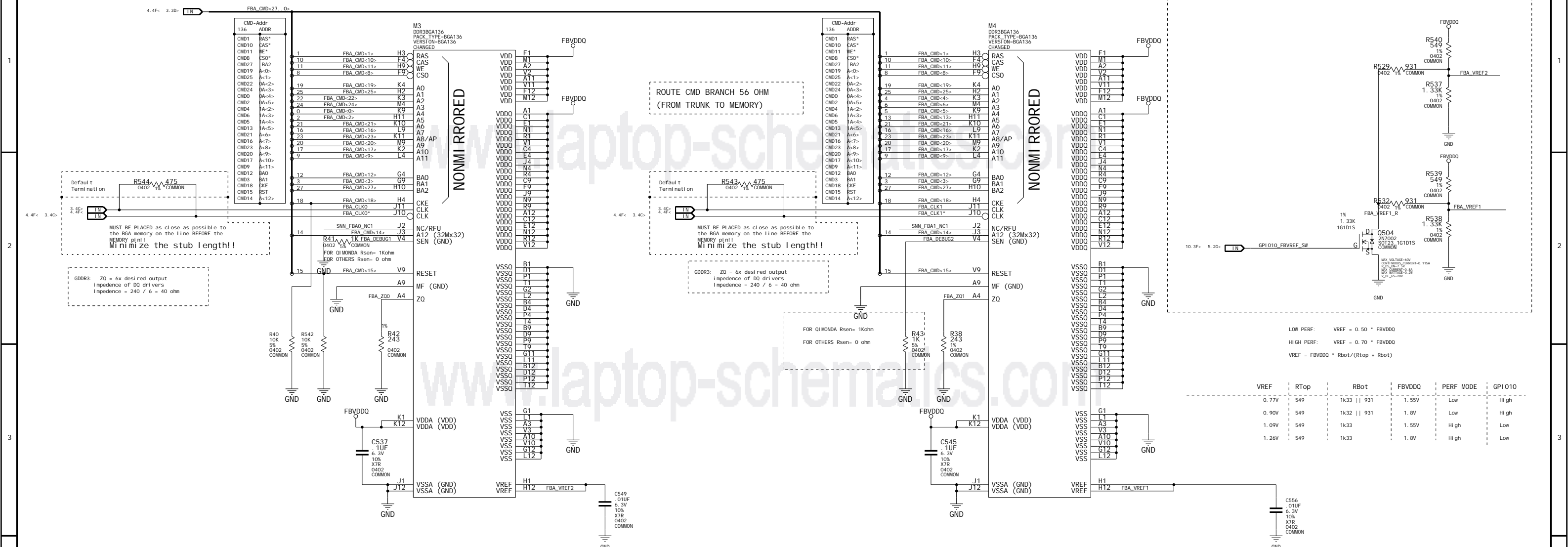
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FRAME BUFFER PARTITION A



VREF	RTop	RBot	FBDVDDQ	PERF. MODE	GPI 010
0.77V	549	1k33 931	1.55V	Low	Hi gh
0.90V	549	1k32 931	1.8V	Low	Hi gh
1.09V	549	1k33	1.55V	Hi gh	Low
1.26V	549	1k33	1.8V	Hi gh	Low

NET RULES for FrameBuffer A

	NET	NV_CRI T I CAL	NV_I MPEDANCE	DI FFPAI R
4.2A~ 3.4C~	1N FBA CLK0	1	800I FF	FBA CLK0
4.2A~ 3.4C~	1N FBA CLK0*	1	800I FF	FBA CLK0
4.2A~ 3.4C~	1N FBA CLK1	1	800I FF	FBA CLK1
4.2A~ 3.4C~	1N FBA CLK1*	1	800I FF	FBA CLK1

4. 5A<	3. 3A<	OUT	FBA DGS WP<7. 0>	1	400HM
4. 4A<	3. 4A<	IN	FBA DGS RN<7. 0>	1	400HM
4. 4A<	3. 3A<	OUT	FBA DGM<7. 0>	1	400HM
4. 4A<	3. 1A<	BI	FBA D-63. 0>	1	400HM
4. 1A<	3. 3D>	IN	FBA CMD<27. 0>	1	600HM

NET		VOLTAGE	MAX_CURRENT	MIN_WIDTH
B1	FBA_VREF0	1.26V	0.02A	12MI L
B1	FBA_VREF1	1.26V	0.02A	12MI L
B1	FBA_VREF2	1.26V	0.02A	12MI L
B1	FBA_VREF3	1.26V	0.02A	12MI L
B1	FBA_Z00	1.26V	0.02A	12MI L
B1	FBA_Z01	1.26V	0.02A	12MI L

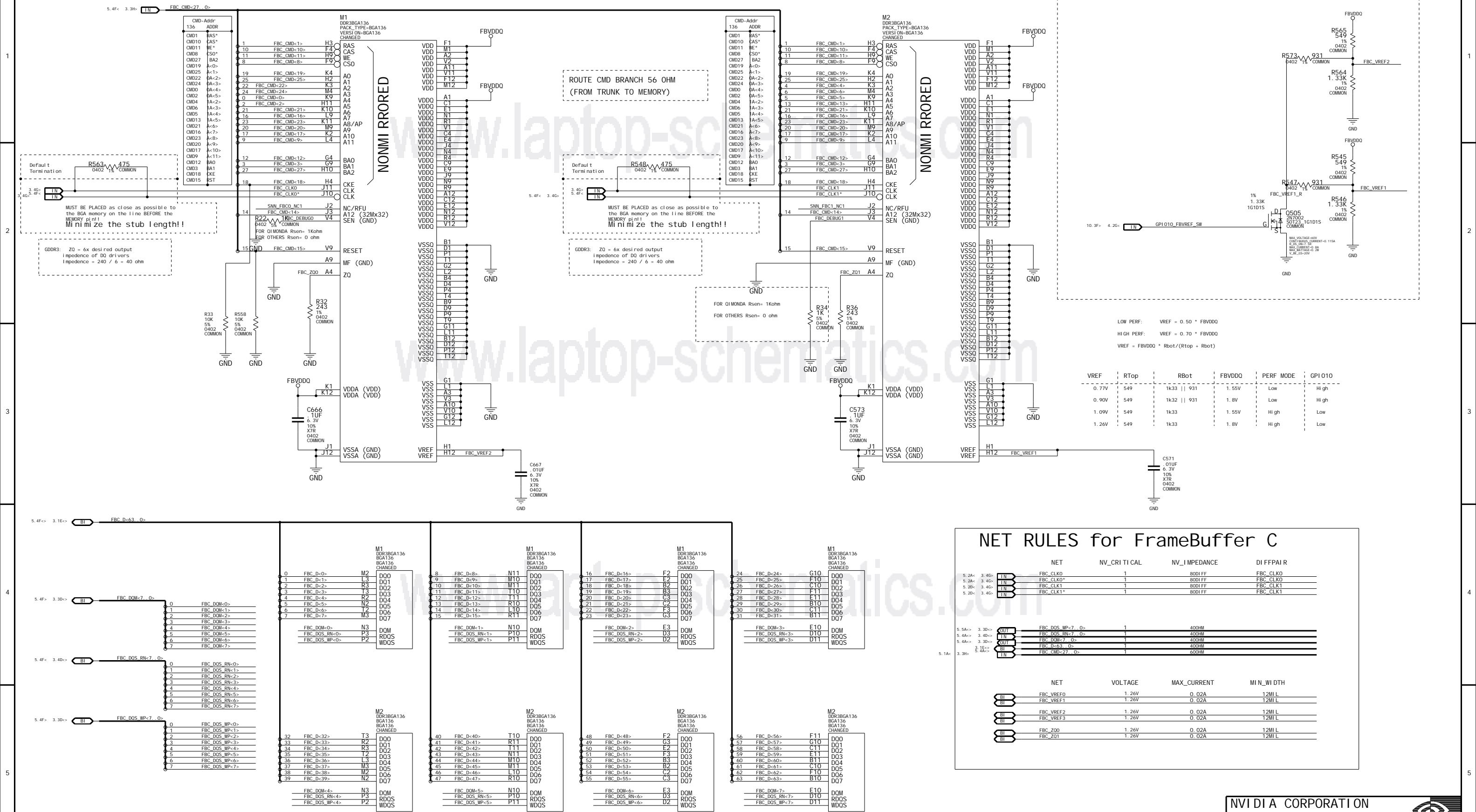
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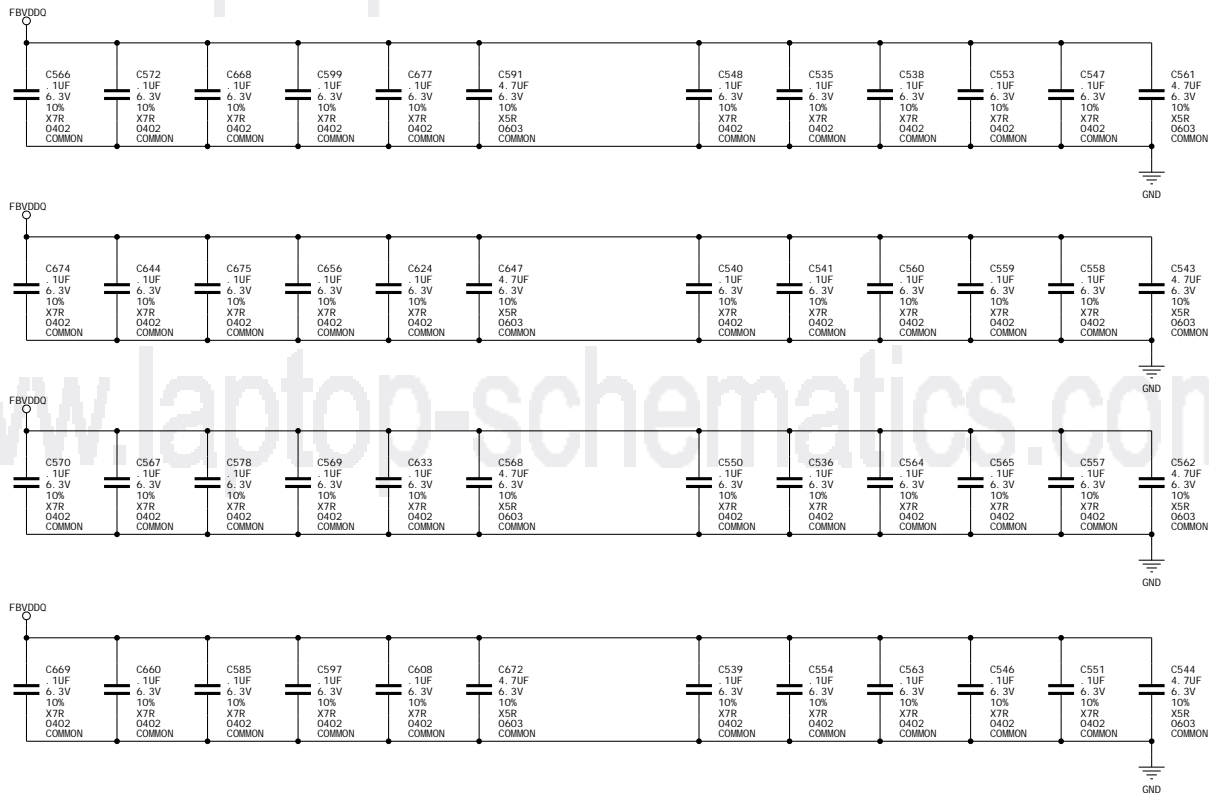
PAGE 5) MEMORY PARTITION C



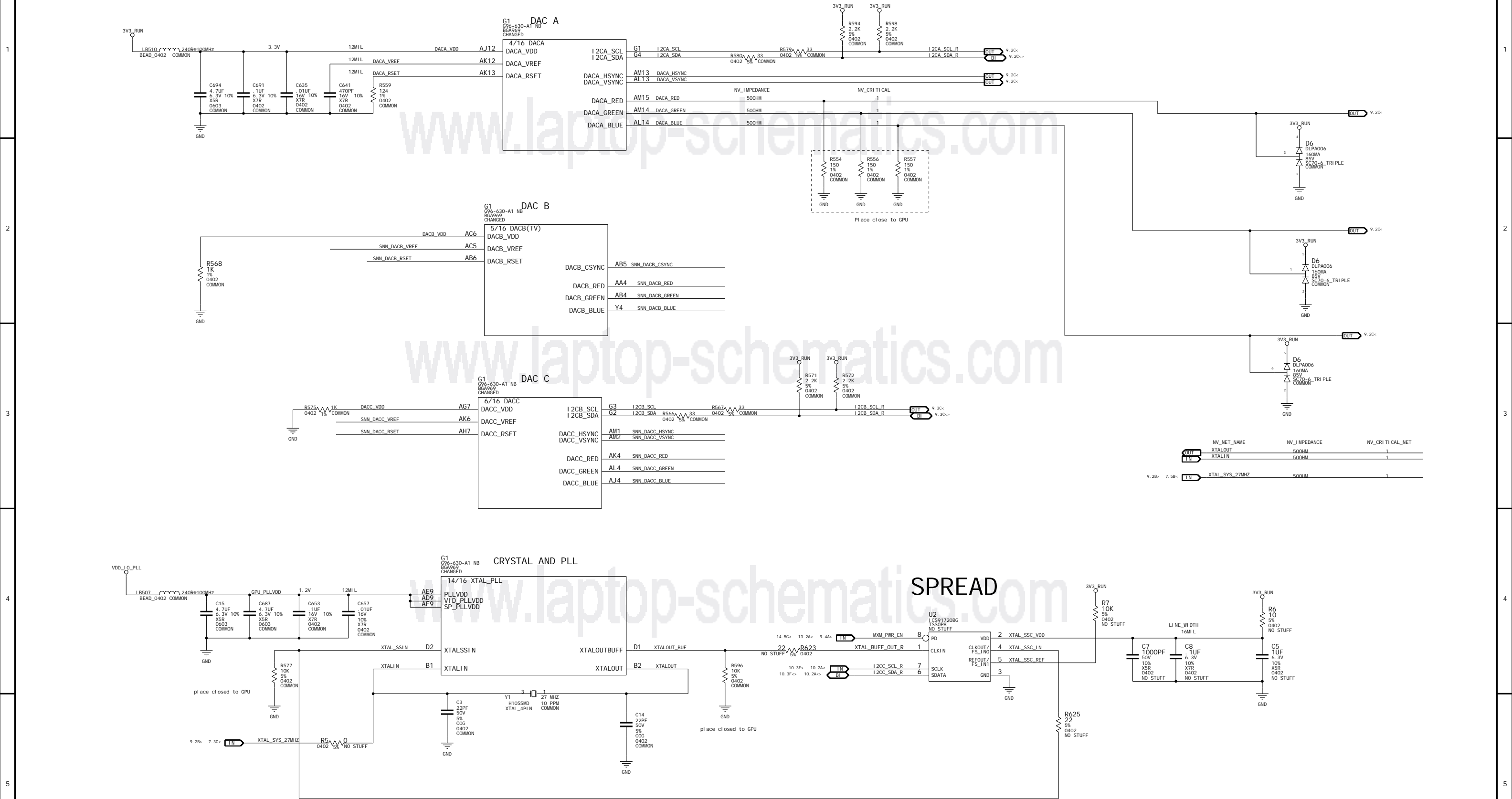
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DECOUPLING CAPS FOR MEMORYS (PARTION A AND PARTION C)



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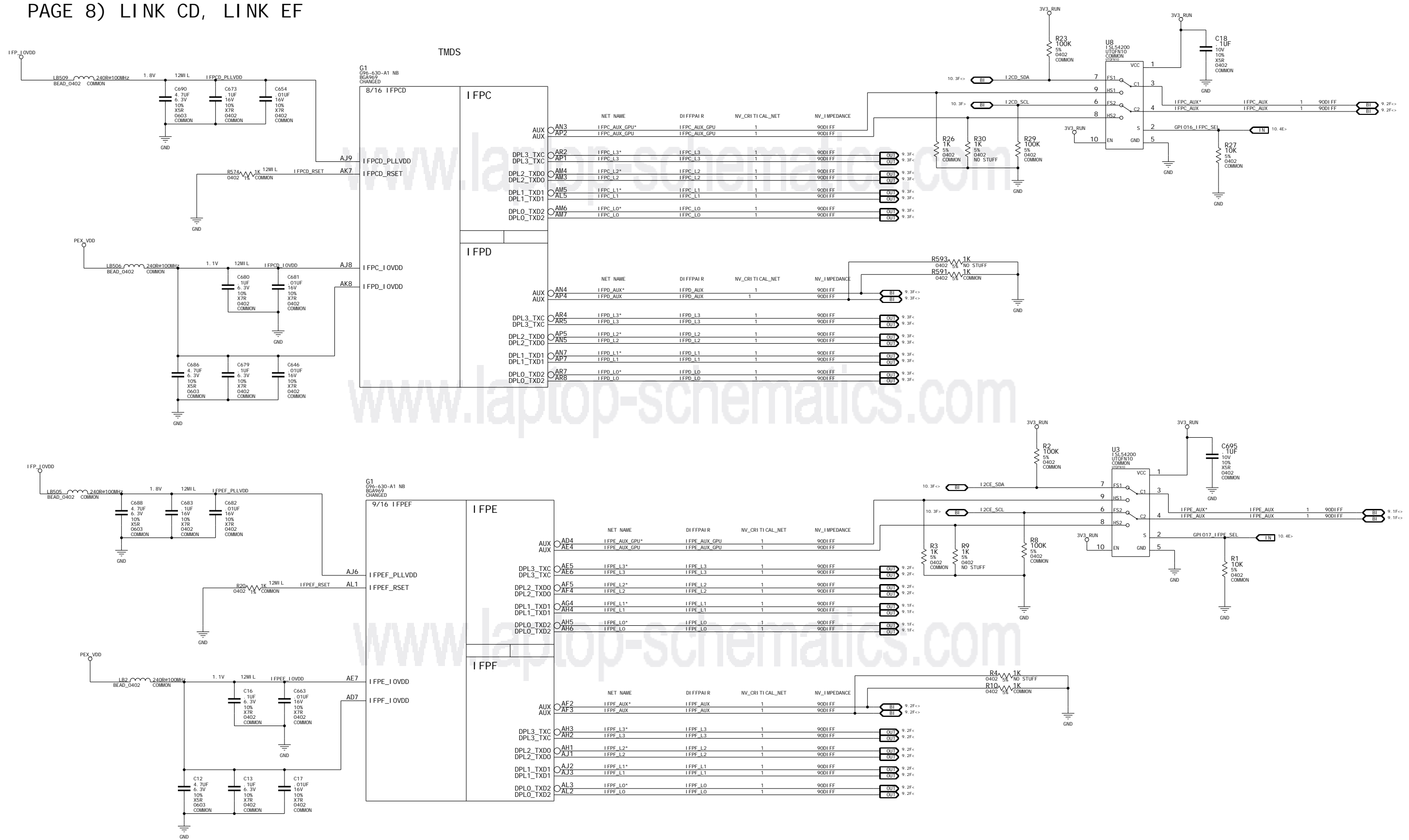


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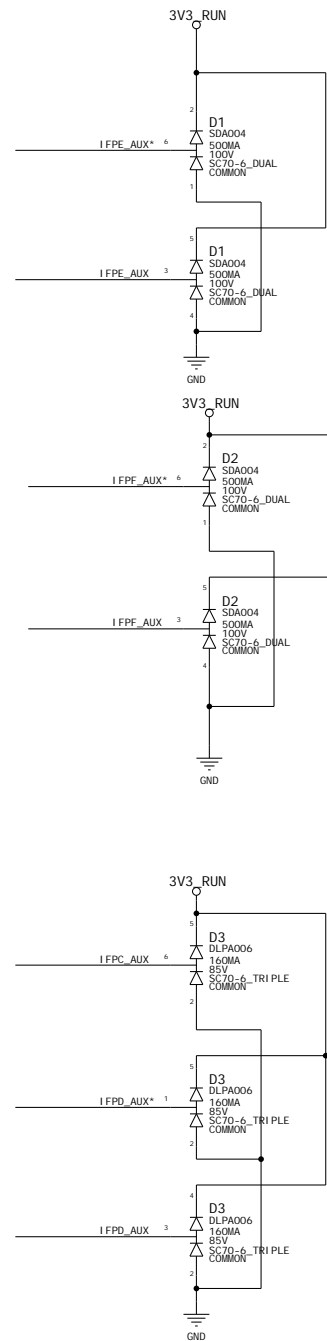
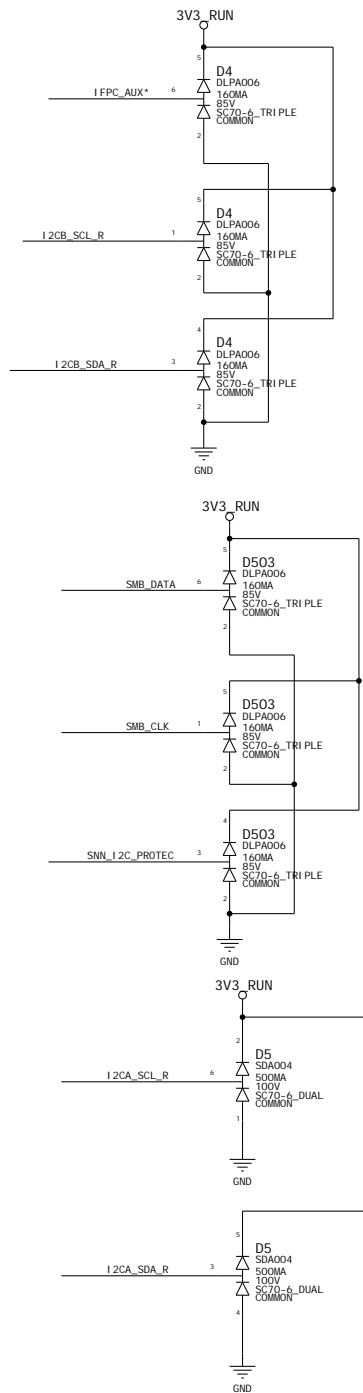
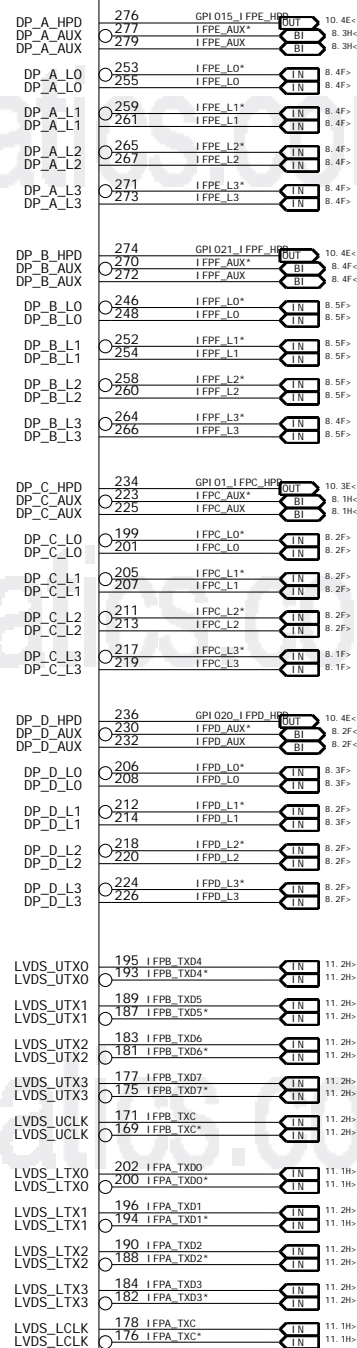
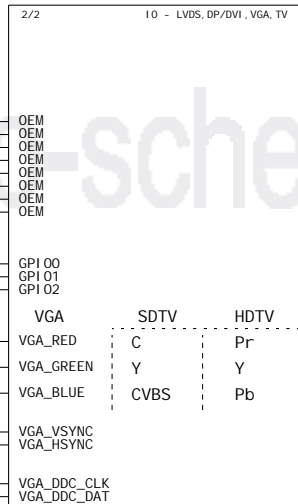
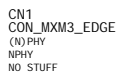
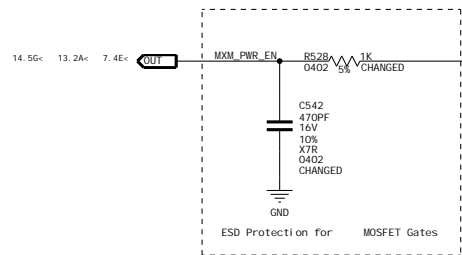
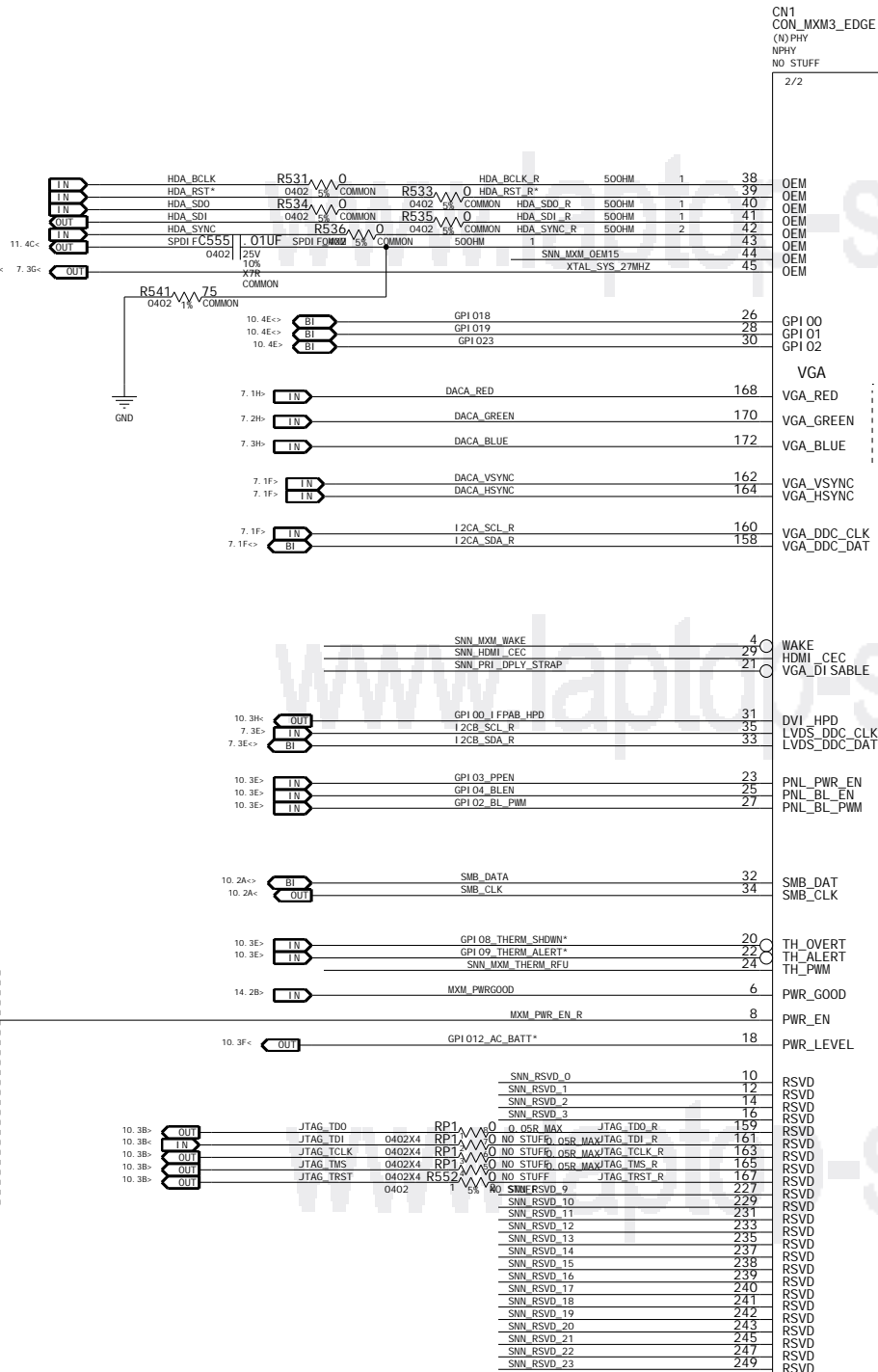
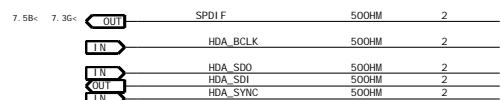
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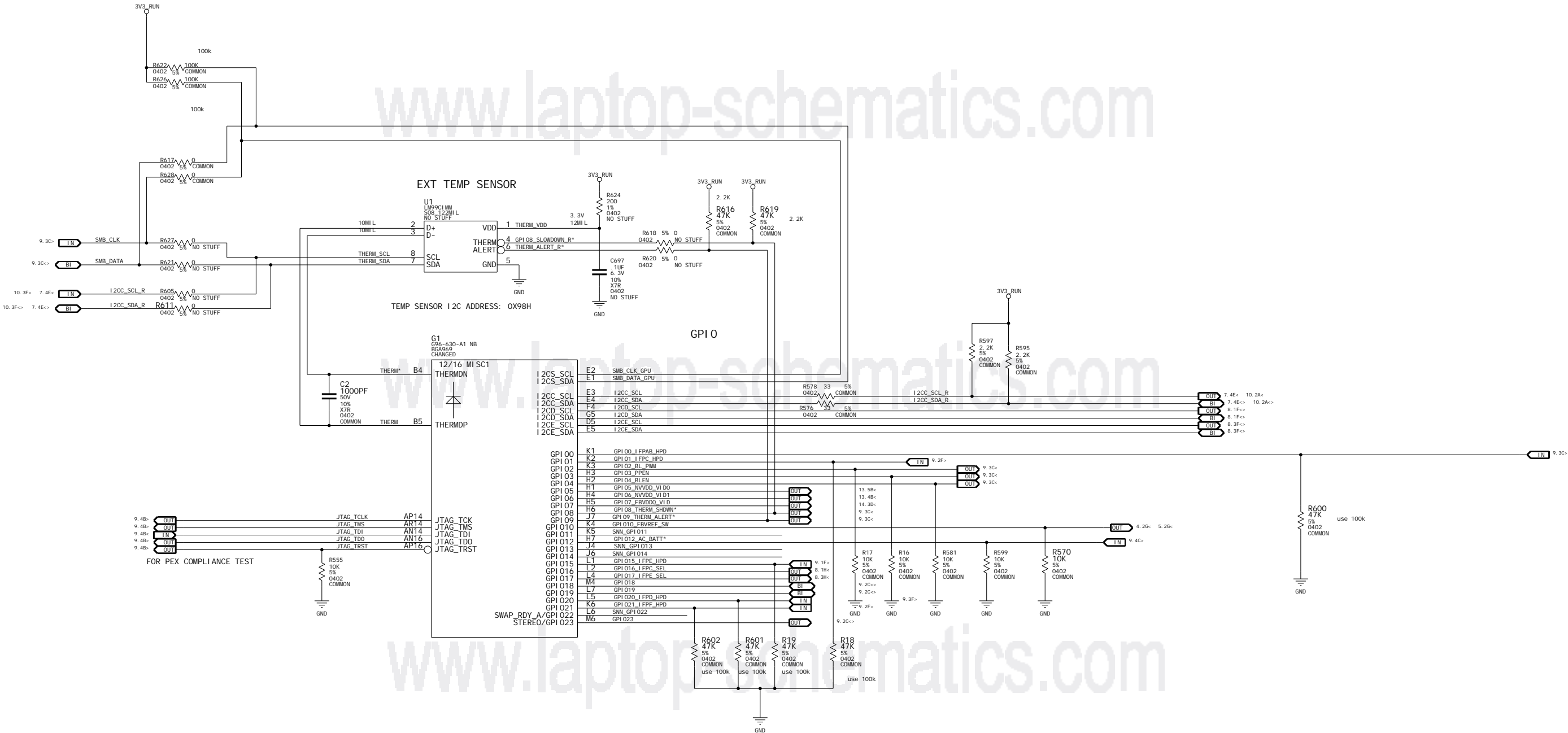
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PAGE 8) LINK CD, LINK EF

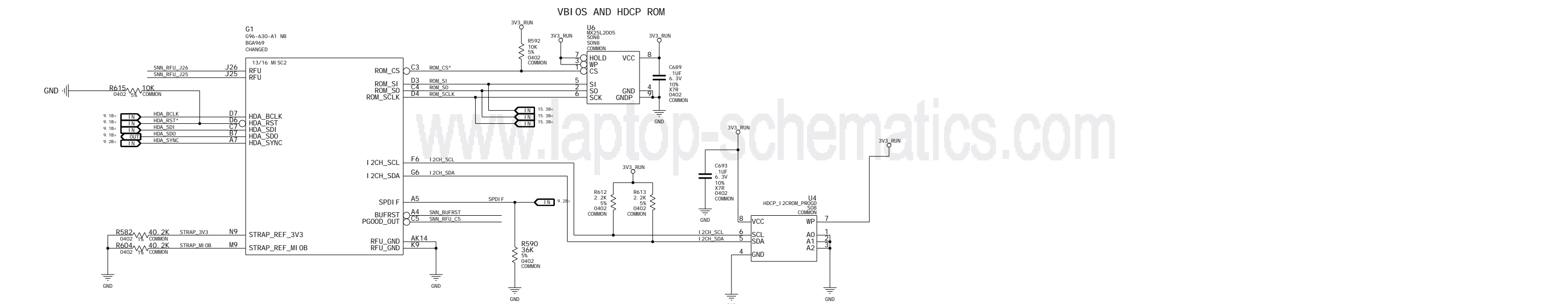
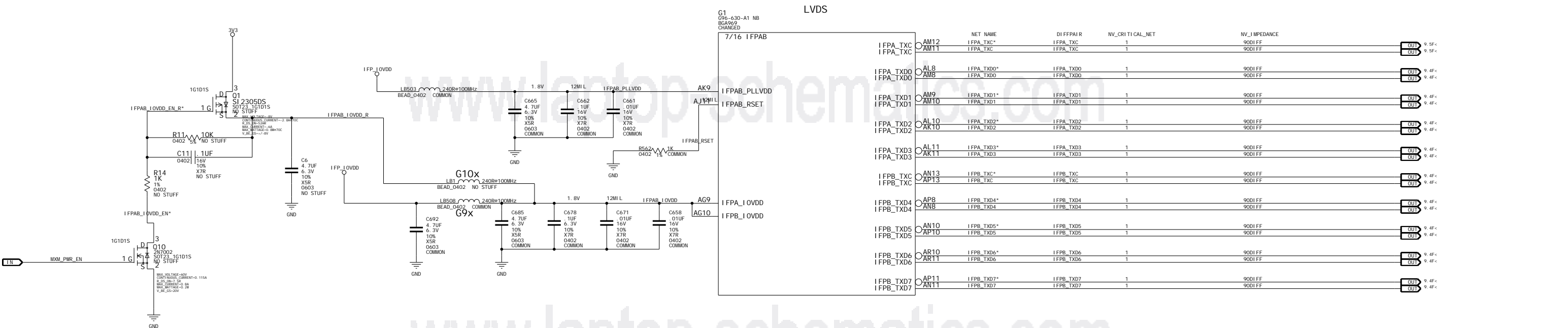


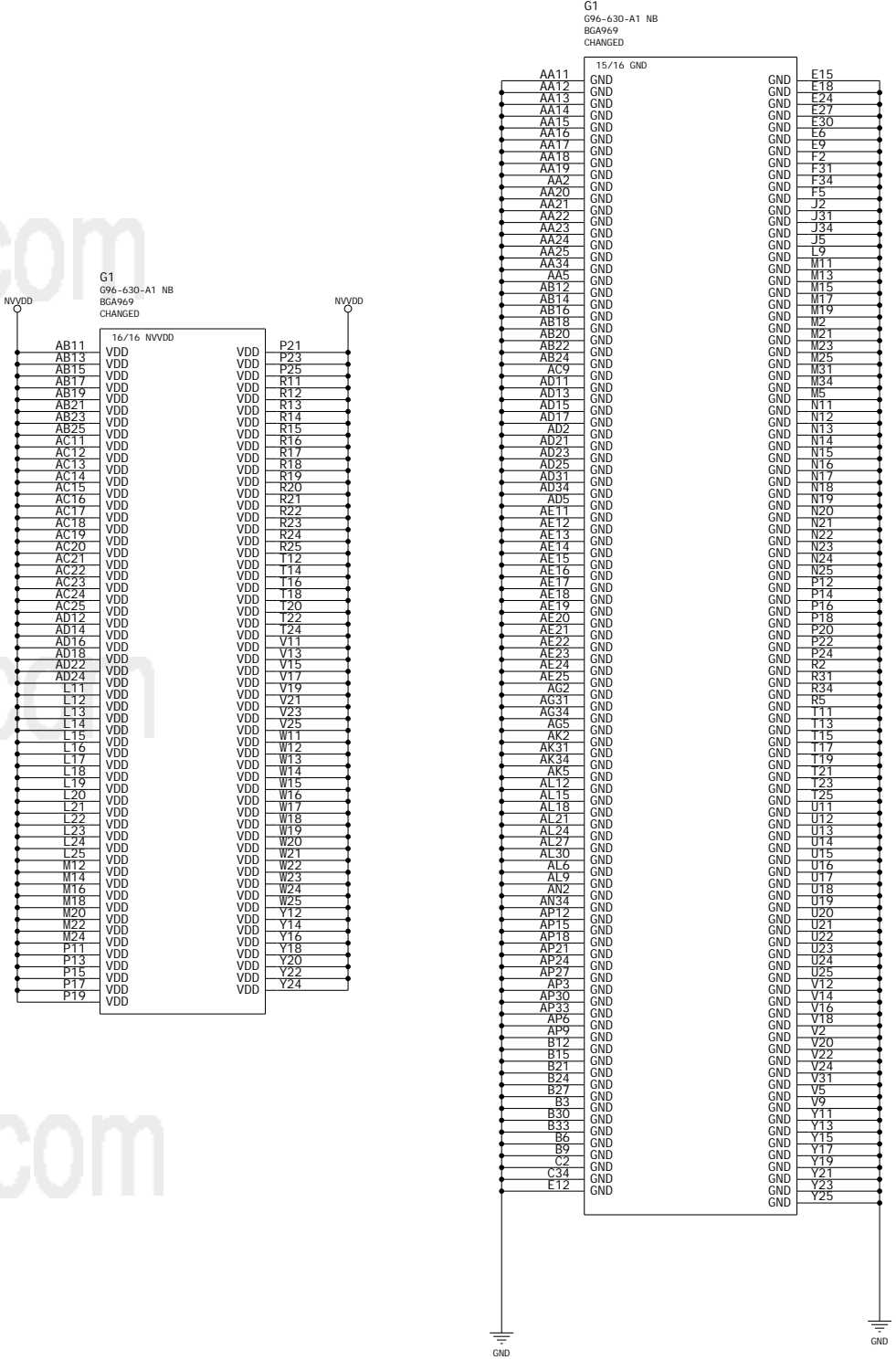
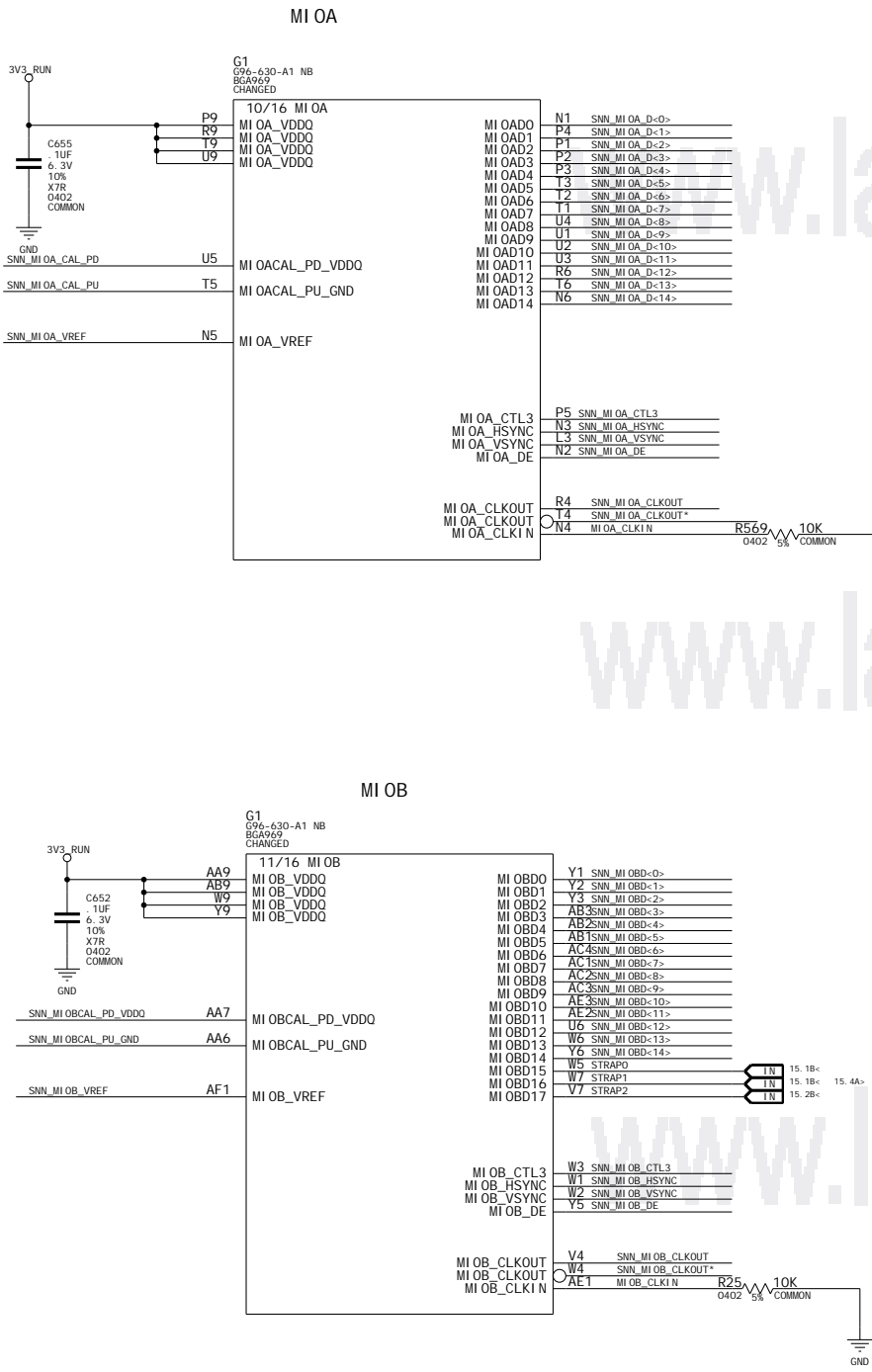
MXM CONNECTOR





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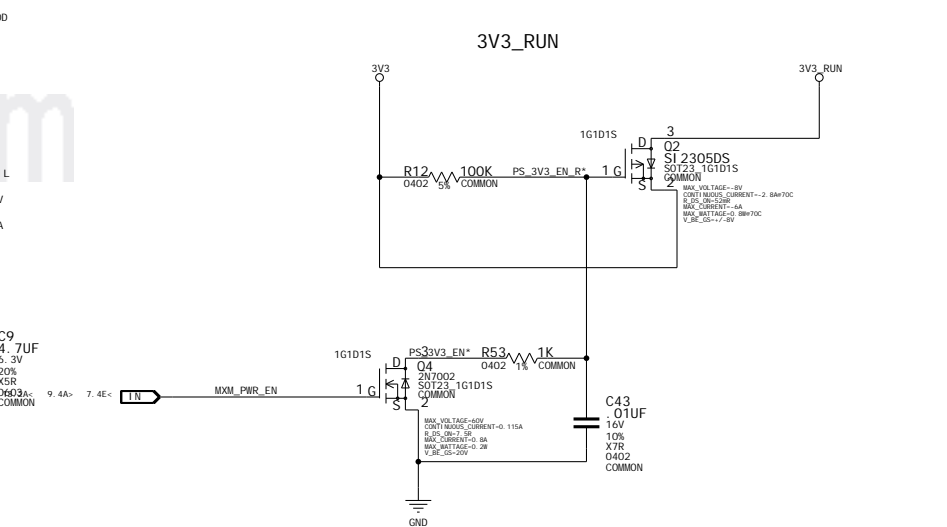
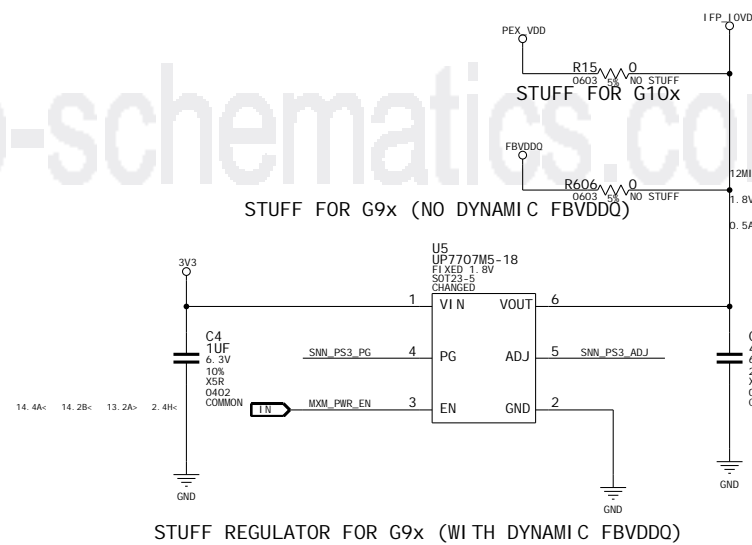
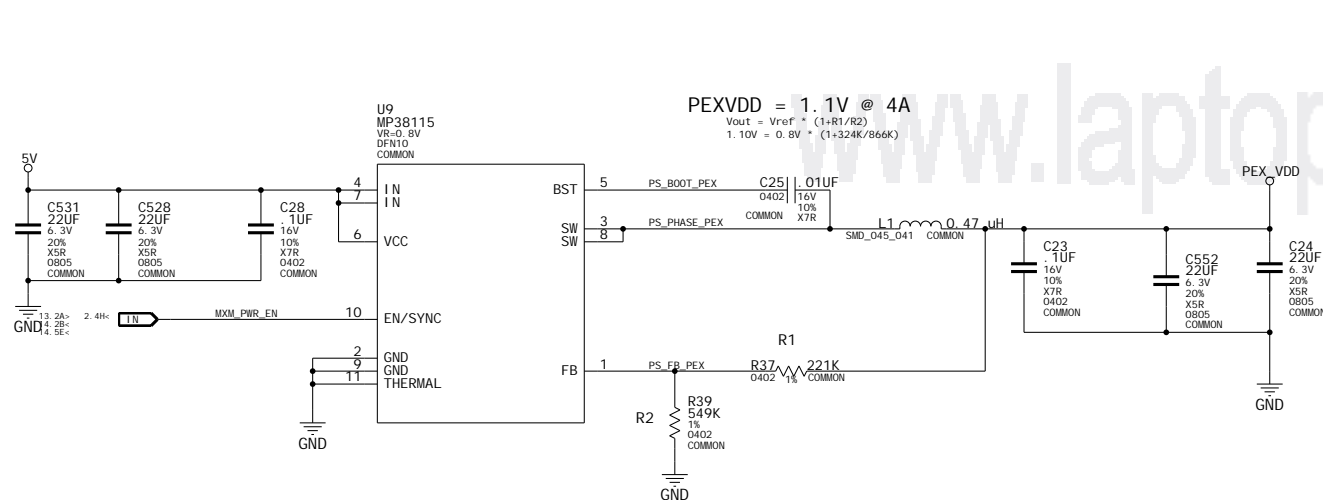
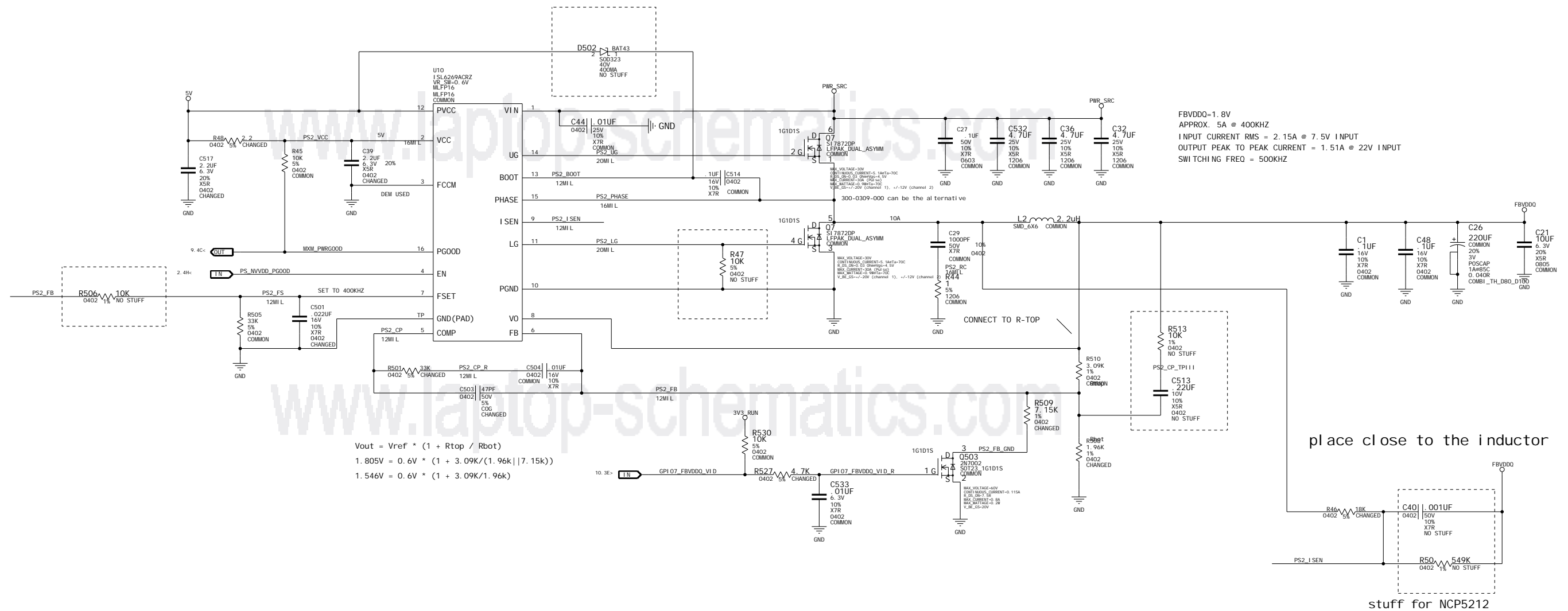







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NAME	hl u	DATE	15-MAY-2008

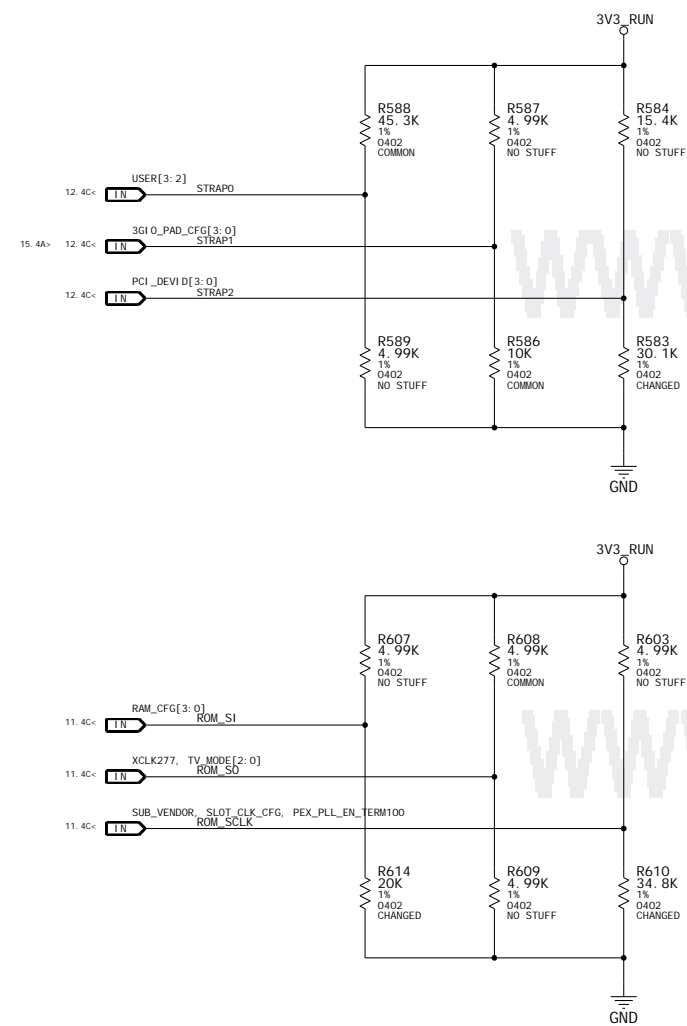
	NET	VOLTAGE	MI_N_WI_DTH_L1_NE	NV_NET_MAX_CURRENT
PEX_VDDO	PEX_VDD	1.2V	12mI/L	3.48A
FBVDDO	FBVDDO	1.8V	12mI/L	10A
1N	PS_VI_N_PEX		12mI/L	



NVI DI A CORPORATI ON 2701 SAN TOMAS EXPRESSWAY SANTA CLARA, CA 95050, USA			
NV_PN 600-10815-0003-300 A			
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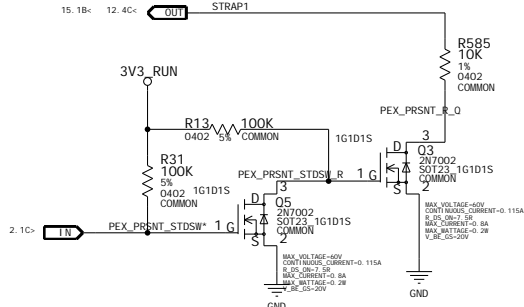
ASSEMBLY	P815-D00 SKU3 G96-630 MXM3.0 TYPE-A 256MB 4pcs 16Mx32
PAGE DETAIL	FBVDDQ, PEX1V2 and 1PF_VDD Power Supply

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	3V3	GND
5K	1000	0000
10K	1001	0001
15K	1010	0010
20K	1011	0011
25K	1100	0100
30K	1101	0101
35K	1110	0110
45K	1111	0111

PEX_PADCFG



PEX_PRSTNT_R*	R_STRAP1	3_GIO_PADCFG_LUT<3..0>
FLOAT	10k	0x1 MOBILE_DEFAULT
GND	5k (10k 10k)	0x0 DESKTOP_DEFAULT

STRAP0

STRAP1

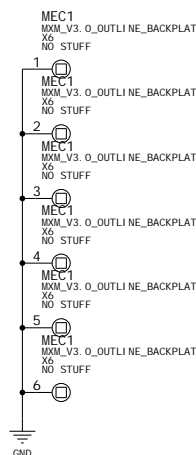
STRAP2

ROM_SI

ROM_SI

ROM_SCLK

USER_BIT0	0xF: 45K PU (unused)
USER_BIT1	
USER_BIT2	
USER_BIT3	
3GIO_PADCFG_LUT_ADR0	
3GIO_PADCFG_LUT_ADR1	0x0: Desktop default (normal swing) - 5k PD
3GIO_PADCFG_LUT_ADR2	0x1: Mobile default (low swing) - 10k PD
3GIO_PADCFG_LUT_ADR3	acc. to //hw/tesla_g98b/manuals/dev_ext_devices.ref
PCI_DEVICE_D0	all 4 bits set by HW strapping
PCI_DEVICE_D1	0x064A: 15K PU (NB9E-GE)
PCI_DEVICE_D2	
PCI_DEVICE_D3	
TV_MODE_BIT0	0x0: NTSC-M
TV_MODE_BIT1	5K PU
TV_MODE_BIT2	
XCLK_277	1: PCI-E GEN2
RAM_CFG_0	256 MB (4pcs. 16Mx32)
RAM_CFG_1	RAM_CFG[3:0] Definitions
RAM_CFG_2	0000 Reserved 0001 Qimonda 0010 Hynix 0011 Samsung
RAM_CFG_3	512 MB (4pcs. 32Mx32)
	RAM_CFG[3:0] Definitions
	0100 25k PD Reserved 0101 30k PD Qimonda 0110 35k PD Hynix 0111 45k PD Samsung
PCI_DEVICE_EXT	0:
SUB_VENDOR	1: SUB_VENDOR BIOS
SLOT_CLK_CONFIG	1:
PEX_PLL_EN_TERM100	1: TERM100 ENABLED



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