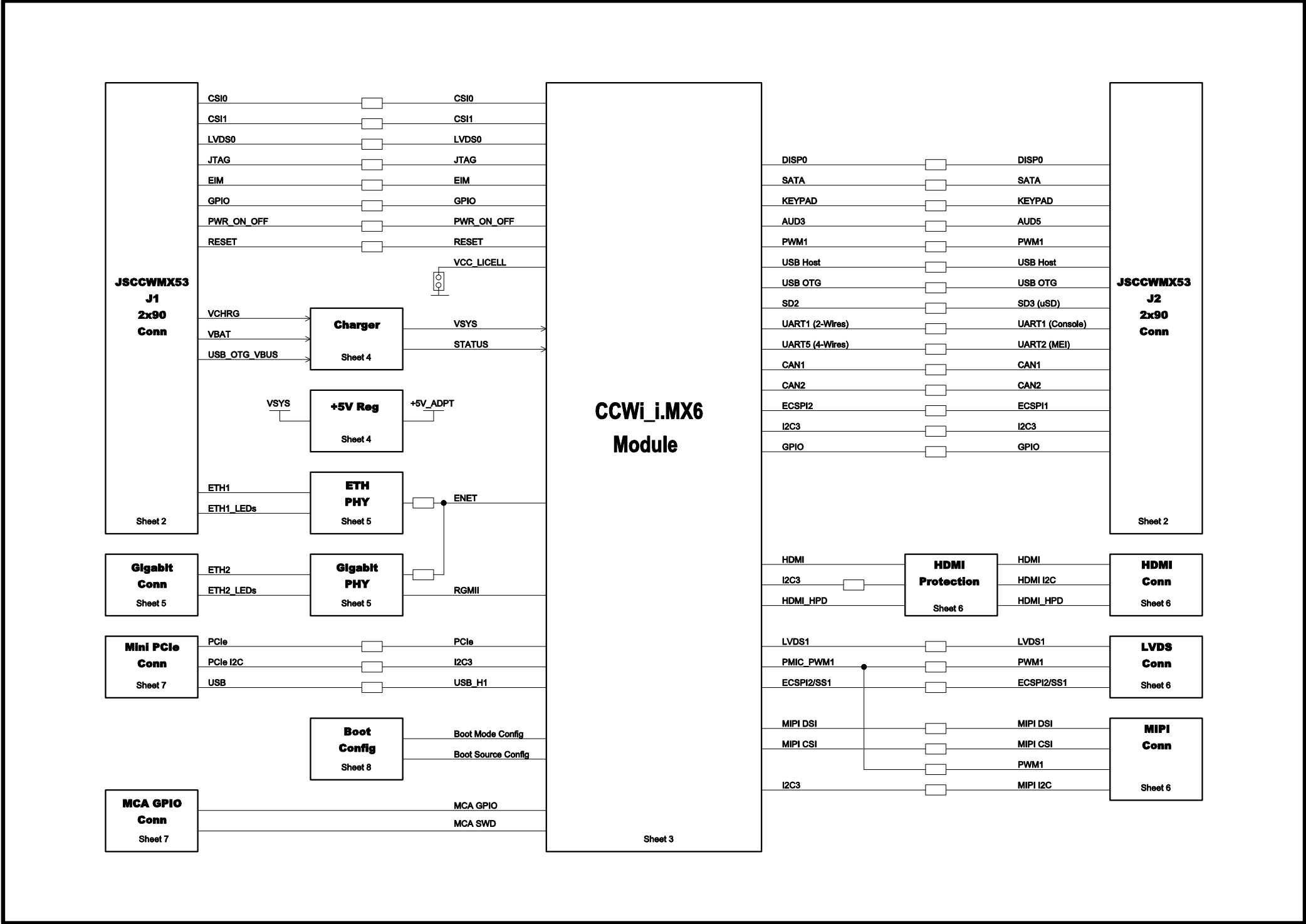


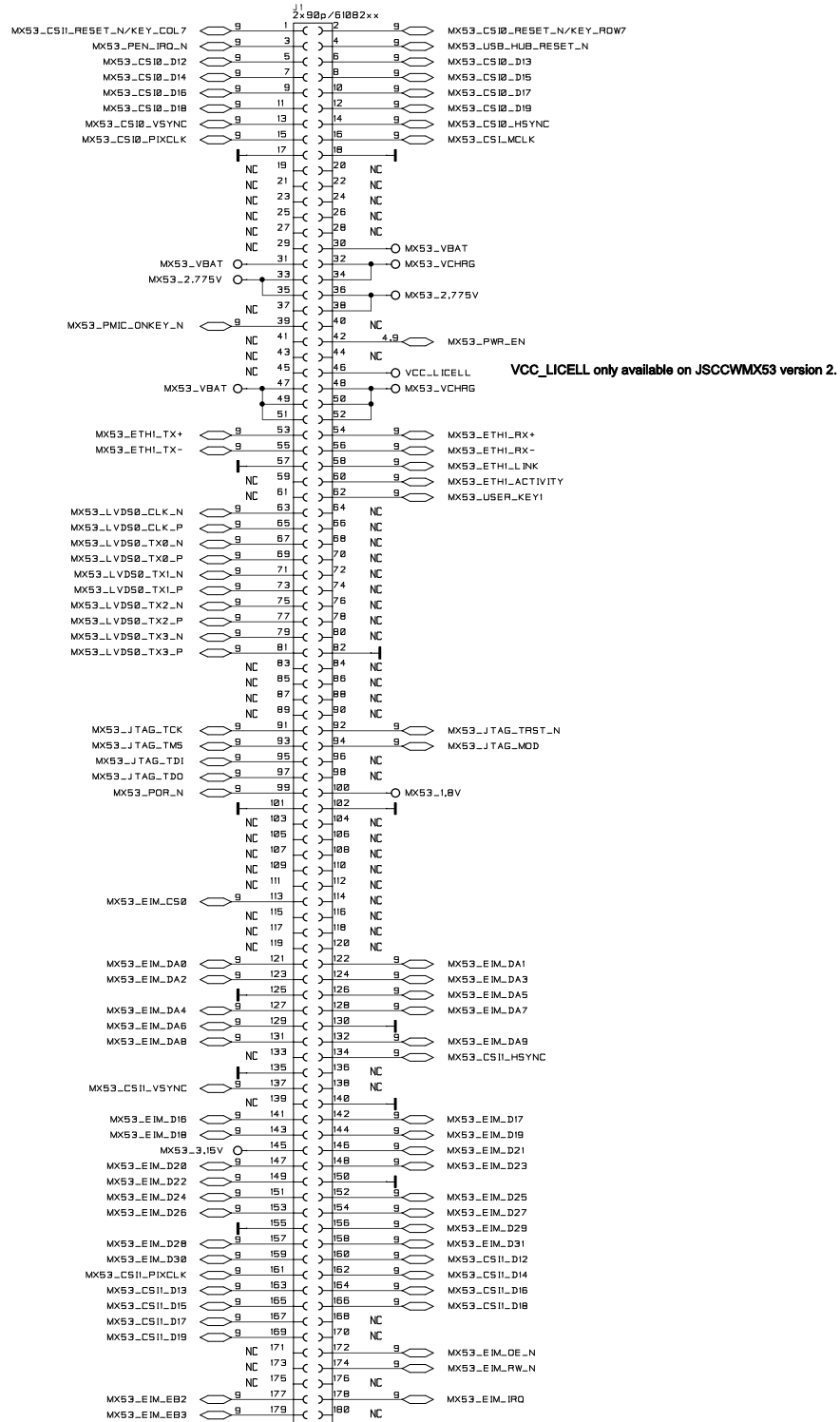
CCWMX6 To JSCCWMX53 Adapter



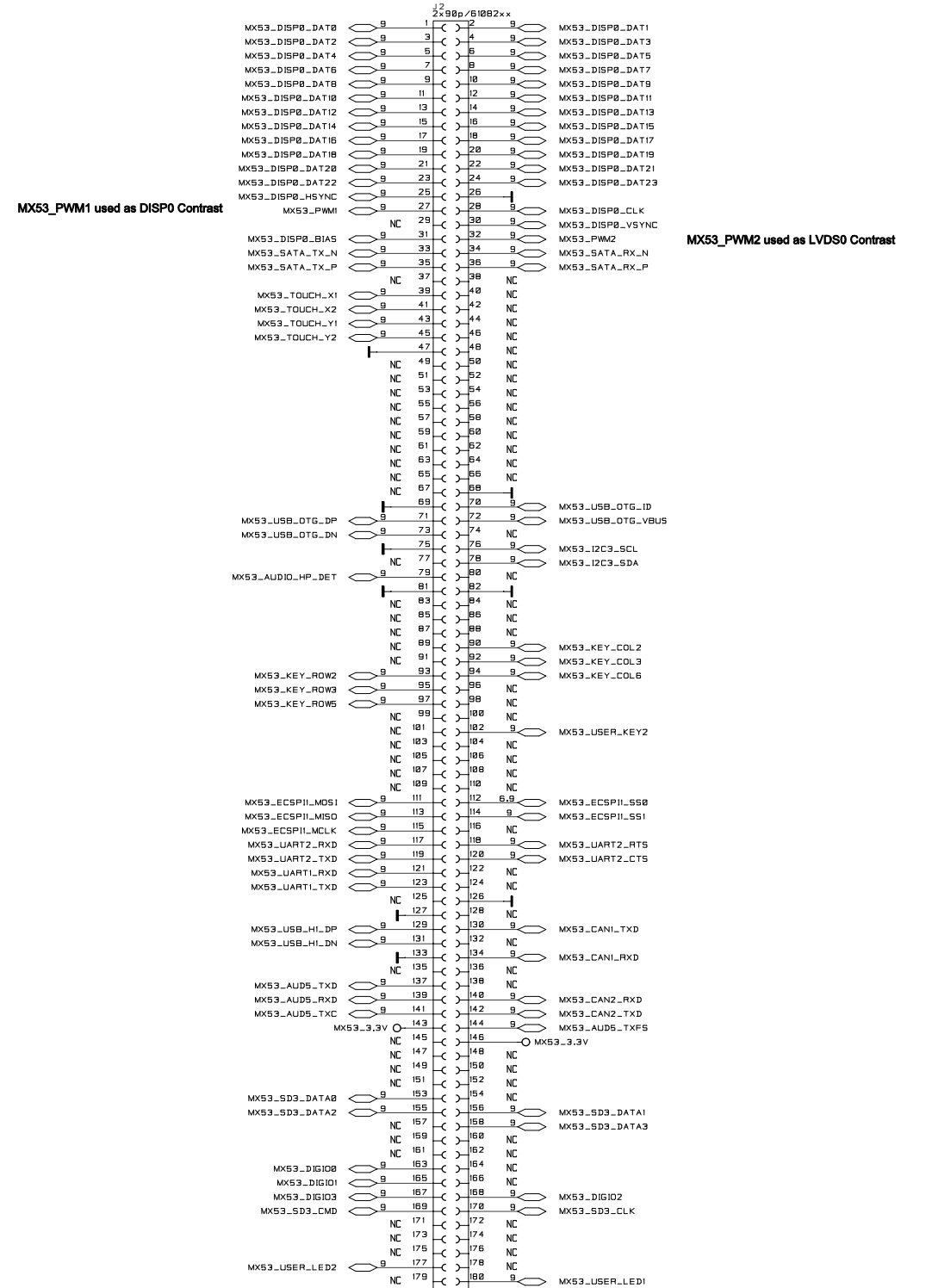
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Usable for:						Filename: 300459x-01_A.scm															
CCWMX6_MX53_ADPT						PCA: CCWMX6_ADPT															
Block Diagram						Title:															
Block Diagram						Partnumber: 55001794-01															
Sheet 1						of 10															
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Rev.	Modification	Date	Name																		
IP	NPR003679	13.03.2014	DA																		
01	RevA: Initial Layout	16.10.2013	DA																		

JSCCWMX53 Connector J1



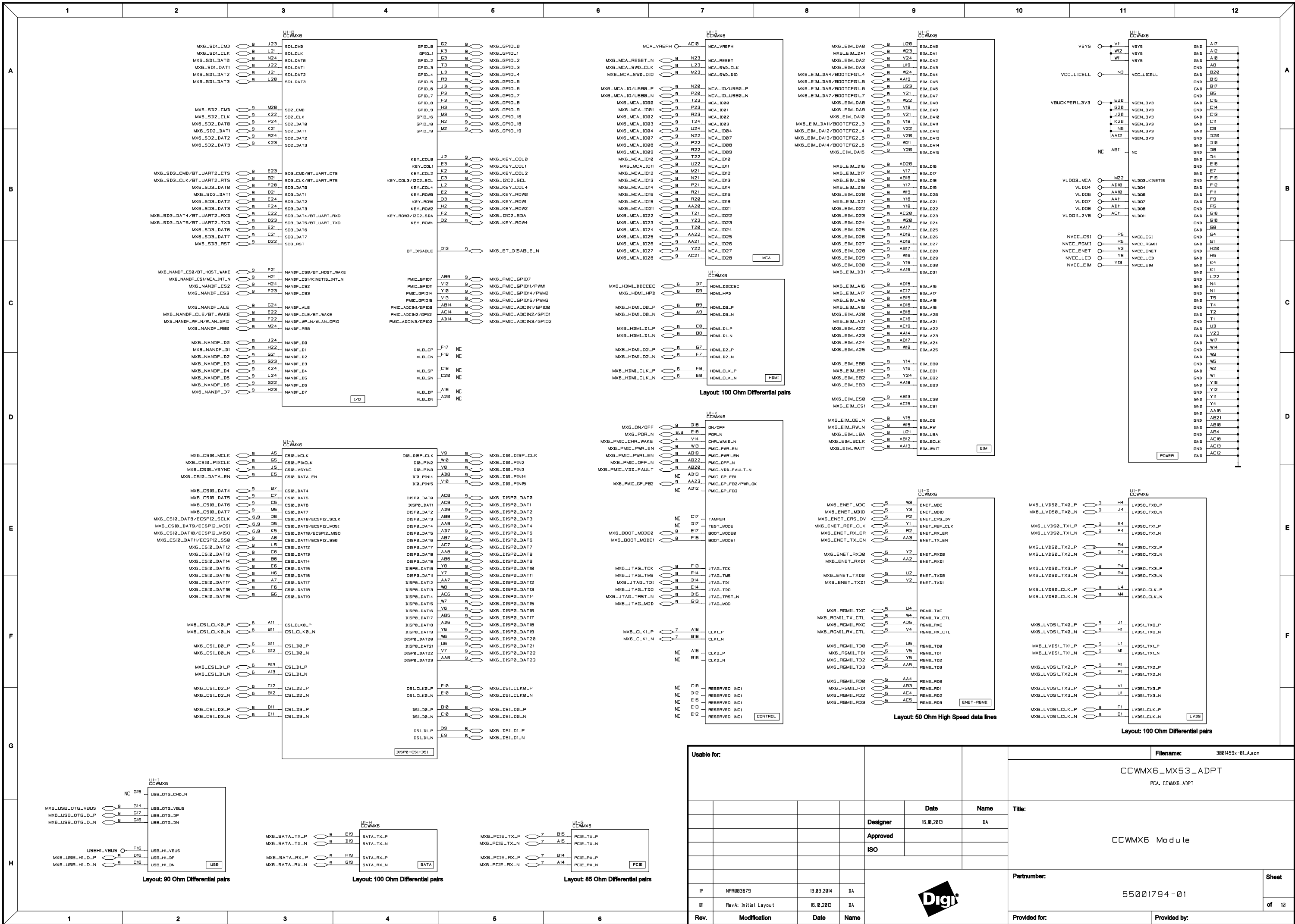
JSCCWMX53 Connector J2



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IP	NPR003679	13.03.2014	DA		
01	RevA: Initial Layout	16.10.2013	DA		
Rev.	Modification	Date	Name		





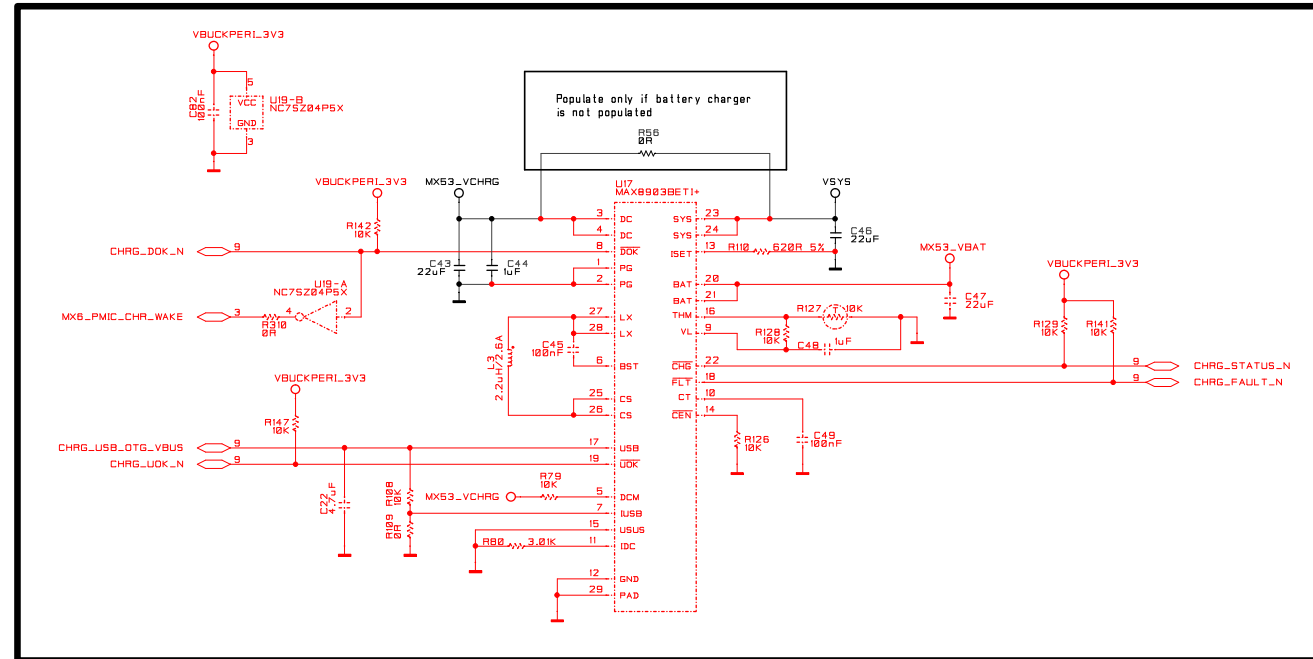
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		Sheet	of 10	
IP	NPR003679	13.03.2014	DA	
81	RevA: Initial Layout	16.10.2013	DA	
Rev.	Modification	Date	Name	

Designer	16.10.2013	Name	DA
Approved		ISO	

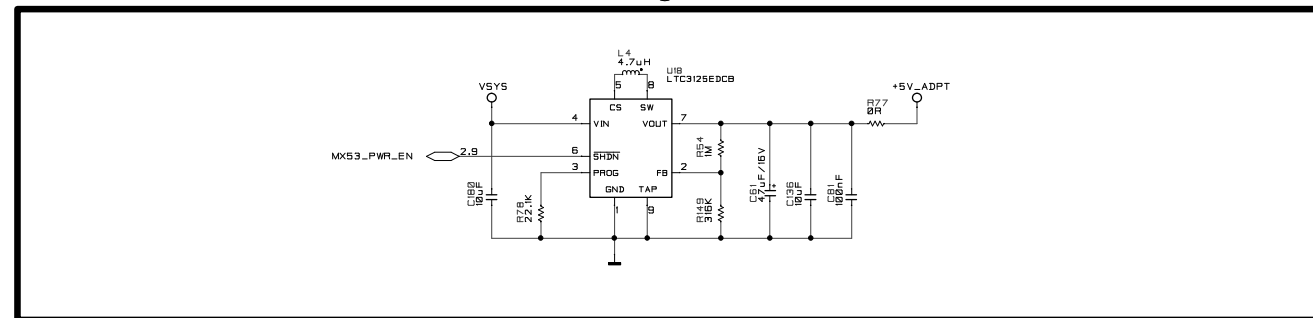
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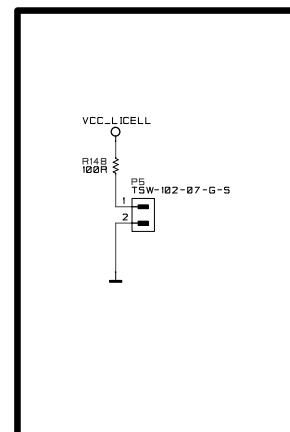
Power Management / Battery Charger



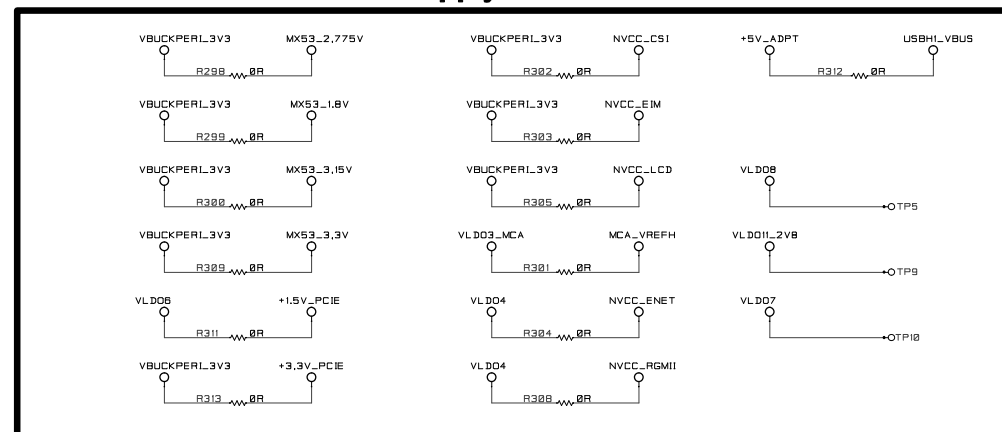
5V Regulator



Coin Cell



Power Supply Connections



System Power Rails

From JSCCW53						
Supply Name	Voltage	Max Current	Generated By	Used on Module	Used on Adapter	Used on JSCCW53
MX53_VCHRG	5.1V	3A	LM22676	-	CHARGER	5V REG
MX53_VBAT	3.0V to 4.2V	-	LI-ION	-	CHARGER	5V REG
USB_OTG_VBUS	5V	600 mA	USB OTG	-	CHARGER	USB_OTG

To CCWMX6						
Supply Name	Voltage	Max Current	Generated By	Used on Module	Used on Adapter	Used on JSCCW53
VSYS	3.0V to 4.4V	2A	MAX8903B	PMIC, WLAN	5V REG	-
VCC_LICELL	3.0V	0.2A	Coin Cell	PMIC RTC	-	-
NVCC_LCD	3.3V	-	PMIC BUCKPERI	MX6 LCD	-	-
NVCC_EIM	3.3V	-	PMIC BUCKPERI	MX6 EIM, BOOT	BOOT CONF	-
NVCC_CSI	3.3V	-	PMIC BUCKPERI	MX6 CSI	-	-
NVCC_ENET	2.5V	-	PMIC LDO4	MX6 ENET	ENET PHY	-
NVCC_RGMII	2.5V	-	PMIC LDO4	MX6 RGMII	RGMII PHY	-
MCA_VREF	3.3V	-	PMIC LDO3	MCA	-	-

From CCWMX6						
Supply Name	Voltage	Max Current	Generated By	Used on Module	Used on Adapter	Used on JSCCW53
VBUCKPERI_3V3	3.3V	1.5A	PMIC BUCKPERI	MX6 SD, MX6 NANDF, MX6 JTAG, MX6 GPIO, eMMC Flash	MX6 LCD, MX6 EIM, MX6 CSI, MX53 1.8V, MX53 3.15V, MX53 3.3V, MX53 2.775V, LVDS1, ENET&Gigabit PHY, HDMI, Boot Strap	-
VLD03_MCA	3.3V	0.2A	PMIC LDO3	MCA	MCA_VREF	-
VLD04	2.5V	0.2A	PMIC LDO4	-	NVCC_RGMII, NVCC_ENET, ENET&Gigabit PHY	-
VLD06	1.5V	0.2A	PMIC LDO6	-	PCIe	-
VGEN7_1V8	2.8V	0.2A	PMIC LDO7	-	-	-
EXT_LDO8	2.8V	0.2A	PMIC LDO8	-	-	-
VGEN11_2V8	2.8V	0.3A	PMIC LDO11	VDDHIGH_IN	-	-

To JSCCW53						
Supply Name	Voltage	Max Current	Generated By	Used on Module	Used on Adapter	Used on JSCCW53
MX53_1.8V	3.3V	-	PMIC BUCKPERI	-	-	JTAG, Reset, EIM, camera2, VGA, Boot
MX53_2.775V	3.3V	-	PMIC BUCKPERI	-	-	RTC, KEYP, I2C, SPI, 1-WIRE, USER IF, SD, Camera 1&2, Audio
MX53_3.15V	3.3V	-	PMIC BUCKPERI	-	-	MEI, Console, CAN1&2, SD,uSD
MX53_3.3V	3.3V	-	PMIC BUCKPERI	-	-	XBee, EIM, USB, VGA, LVDS, Audio, HDMI, Touch

Generated and Used in Adapter						
Supply Name	Voltage	Max Current	Generated By	Used on Module	Used on Adapter	Used on JSCCW53
+5V_ADPT	+5V	1A	LTC3125	-	LVDS, HDMI, MIPI	-

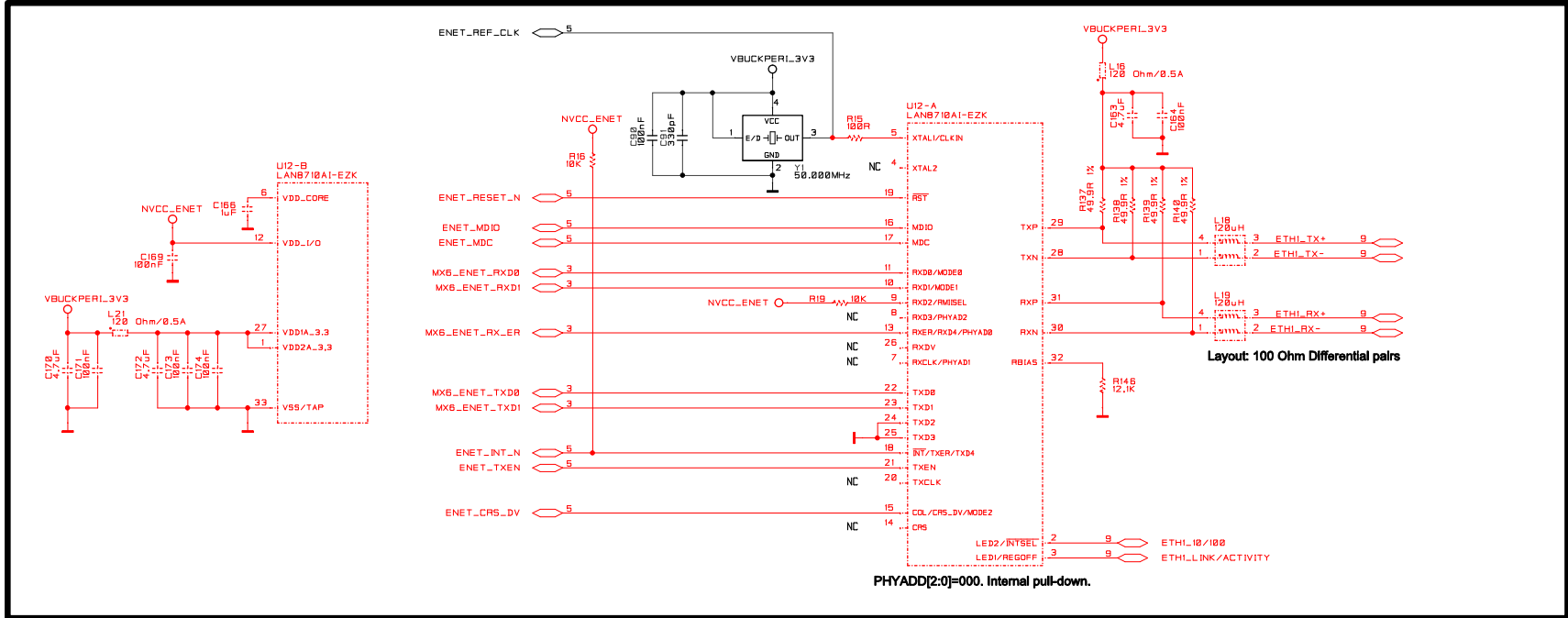
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CCWMX6_MX53_ADPT					
PCA: CCWMX6_ADPT					
Title:			Battery charger, Coin Cell connector Power connections		
Partnumber:			55001794-01		
Sheet			of 10		
Rev.	Modification	Date	Name	ISO	Provided for:
IP	NPR003679	13.03.2014	DA	DA	
01	RevA: Initial Layout	16.10.2013	DA	DA	



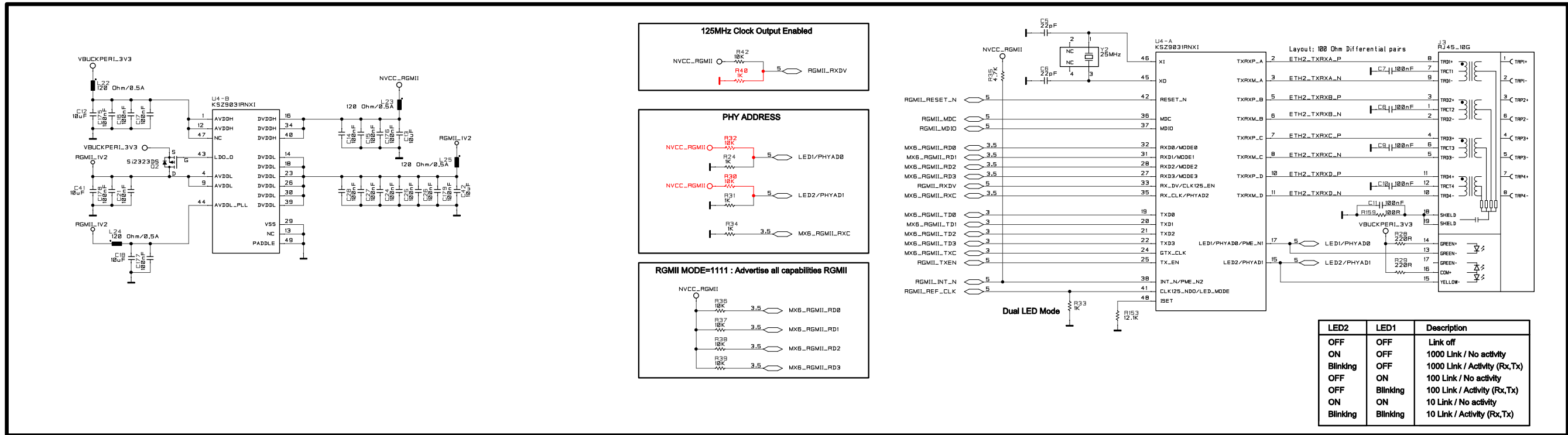
Ethernet Configuration



10/100 Ethernet



Gigabit Ethernet



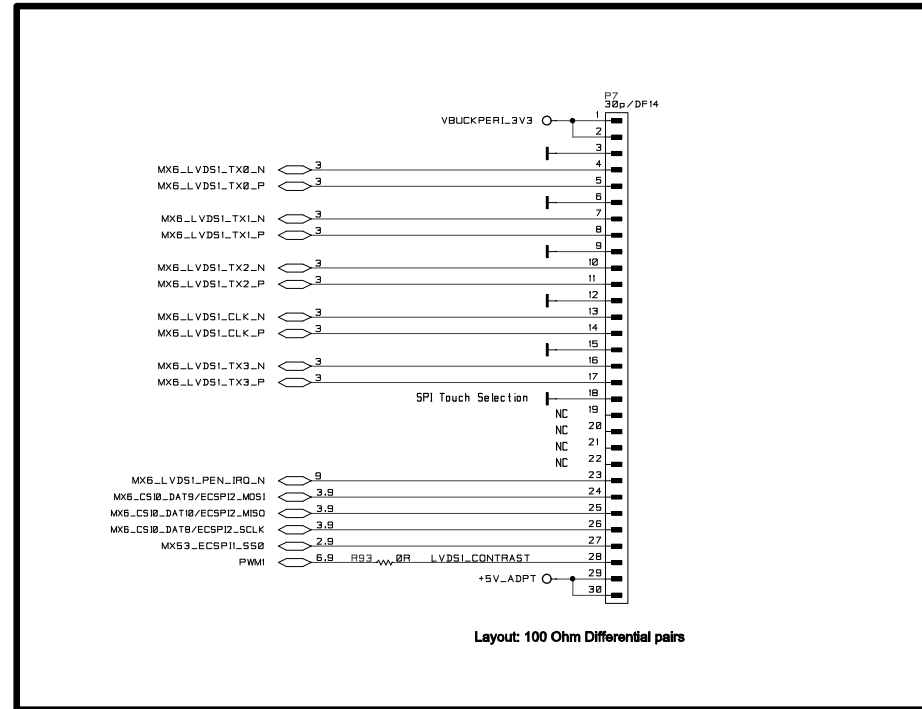
LED2	LED1	Description
OFF	OFF	Link off
ON	OFF	1000 Link / No activity
Blinking	OFF	1000 Link / Activity (Rx,Tx)
OFF	ON	100 Link / No activity
OFF	Blinking	100 Link / Activity (Rx,Tx)
ON	ON	10 Link / No activity
Blinking	Blinking	10 Link / Activity (Rx,Tx)

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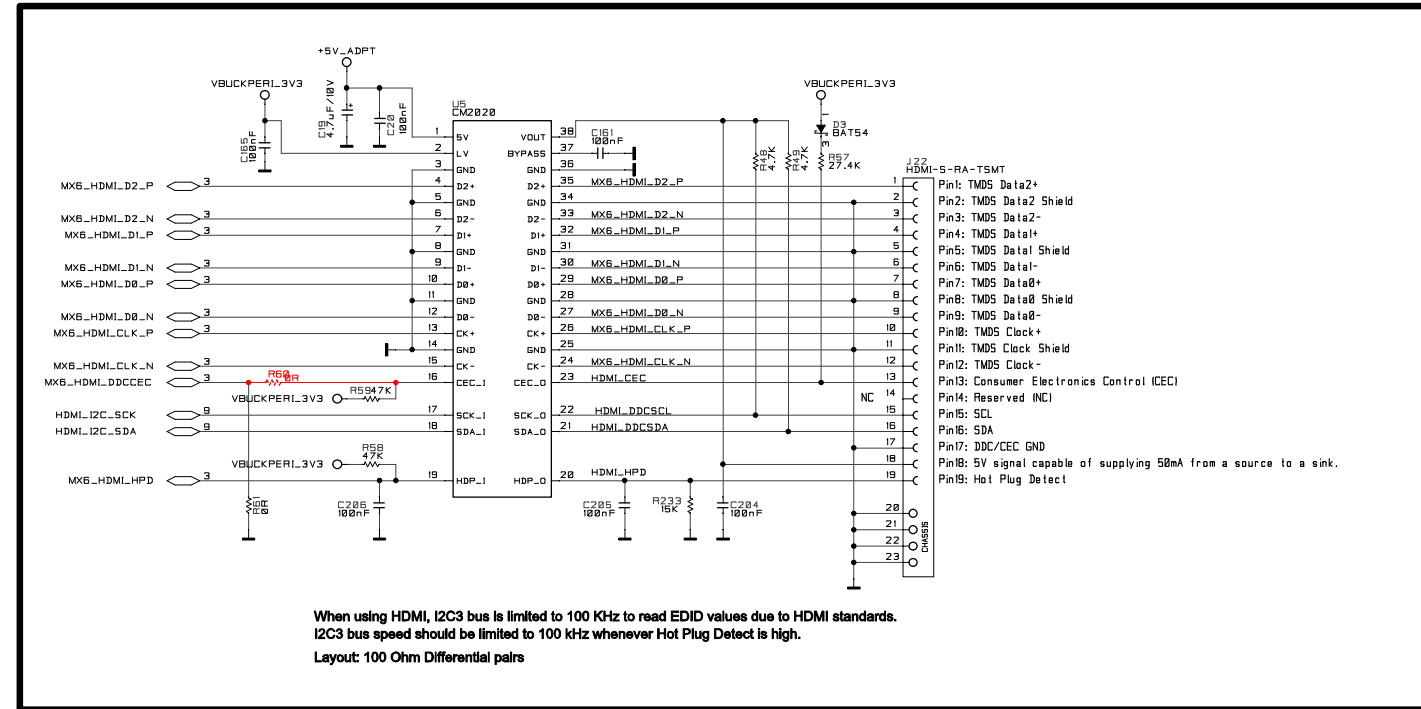
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		Partnumber: 55001794-01	
		Sheet of 10	
Rev.	Modification	Date	Name
IP	NPR003679	13.03.2014	DA
B1	RevA: Initial Layout	16.10.2013	DA



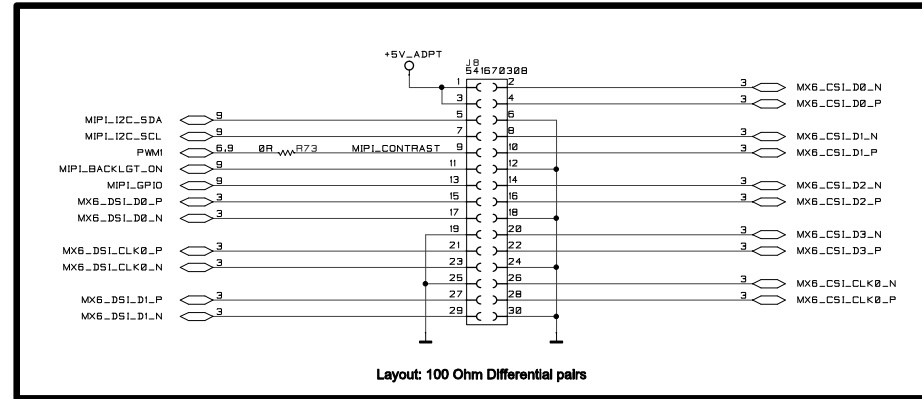
LVDS1



HDMI

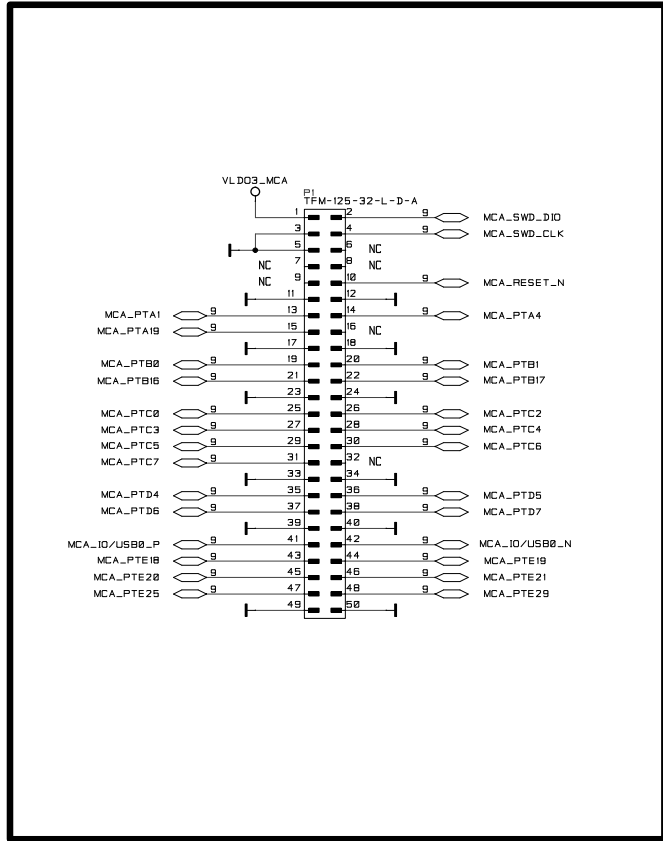


MIPI Interface Connector

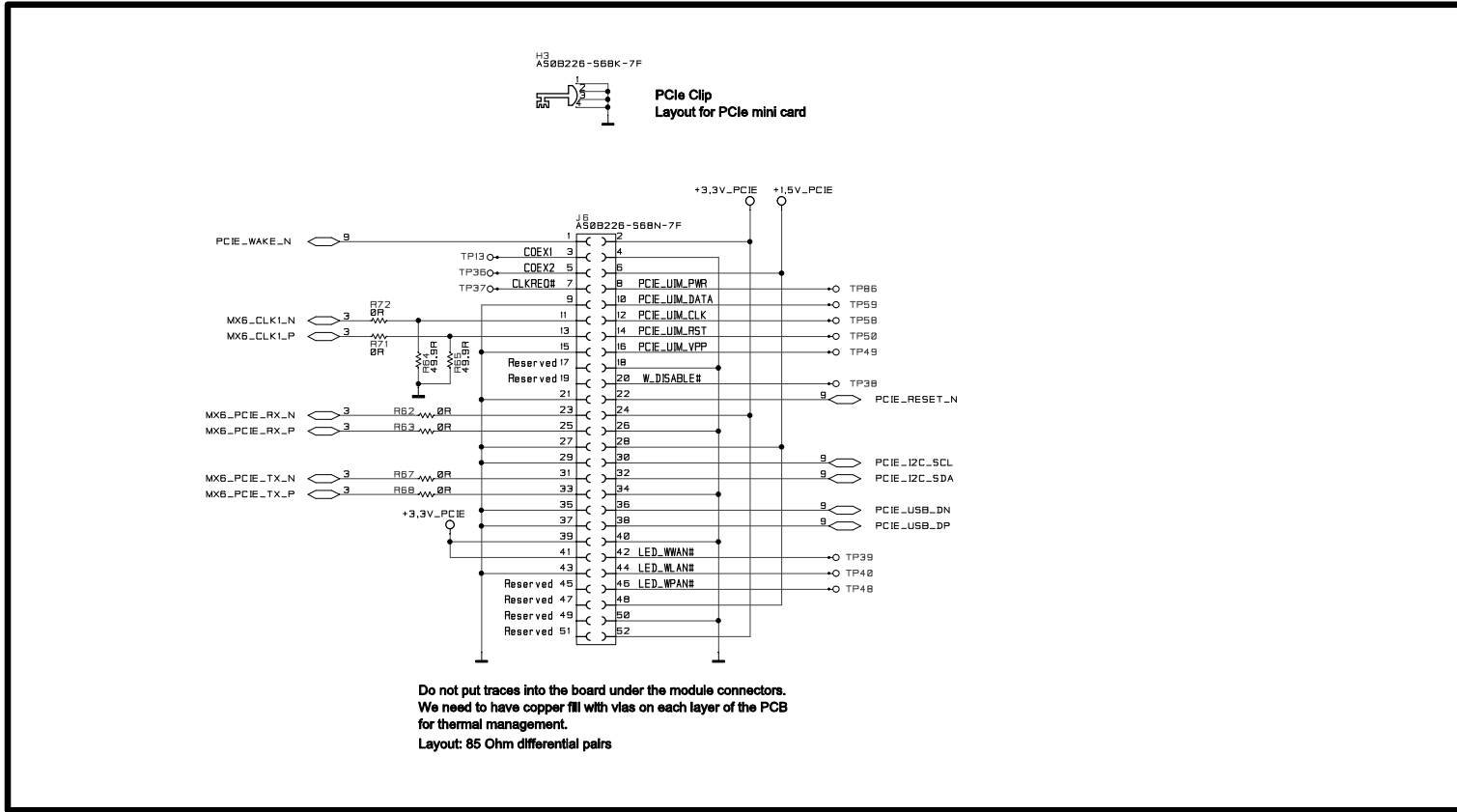



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						Title: LVDS Connector, HDMI Connector, MIPI CSI/DSI Connector	
						Partnumber: 55001794-01	
						Sheet of 10	
						Provided for: Provided by:	
IP	NPR003679	13.03.2014	DA				
01	RevA: Initial Layout	16.10.2013	DA				
Rev.	Modification	Date	Name				

MCA

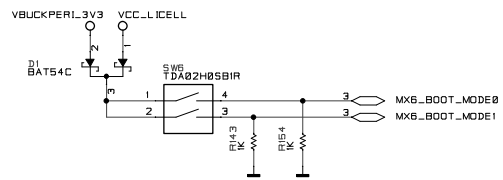


Mini PCIe Card Connector



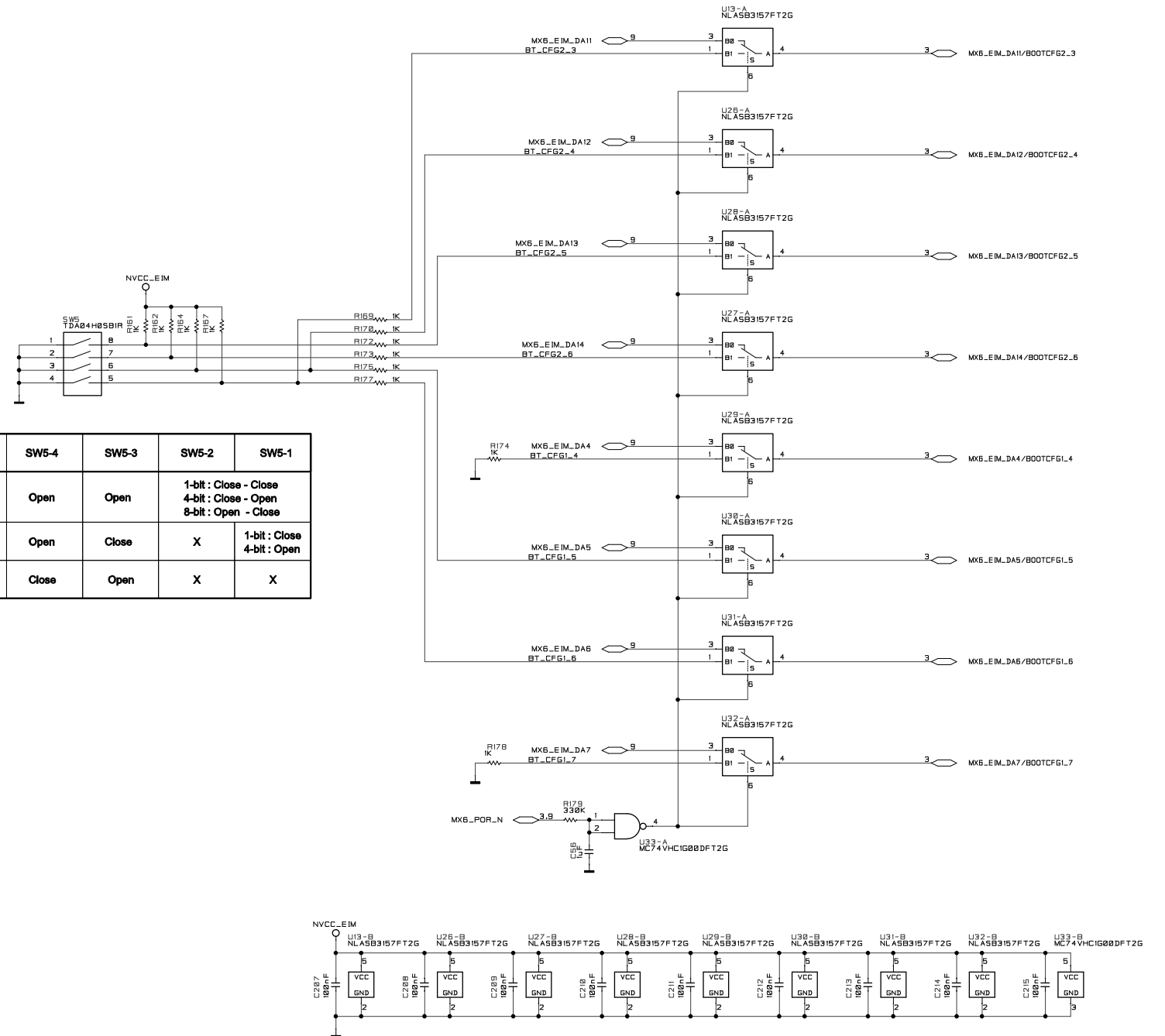
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						Partnumber: 55001794-01															
						Sheet of 10															
<table border="1"> <thead> <tr> <th>Rev.</th> <th>Modification</th> <th>Date</th> <th>Name</th> </tr> </thead> <tbody> <tr> <td>IP</td> <td>NPR003679</td> <td>13.03.2014</td> <td>DA</td> </tr> <tr> <td>01</td> <td>RevA: Initial Layout</td> <td>16.10.2013</td> <td>DA</td> </tr> </tbody> </table>						Rev.	Modification	Date	Name	IP	NPR003679	13.03.2014	DA	01	RevA: Initial Layout	16.10.2013	DA			Provided for: Provided by:	
Rev.	Modification	Date	Name																		
IP	NPR003679	13.03.2014	DA																		
01	RevA: Initial Layout	16.10.2013	DA																		

Boot Mode



BOOT_MODE1	BOOT_MODE0	Description
Open	Open	Boot From Fuses
Open	Close	Serial Downloader
Close	Open	Boot From board settings
Close	Close	Reserved

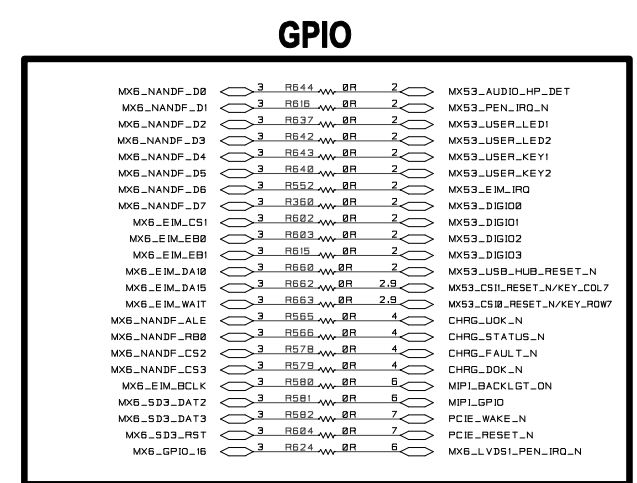
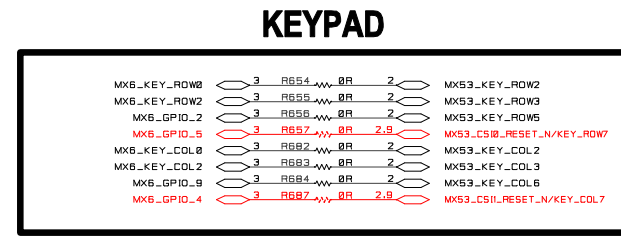
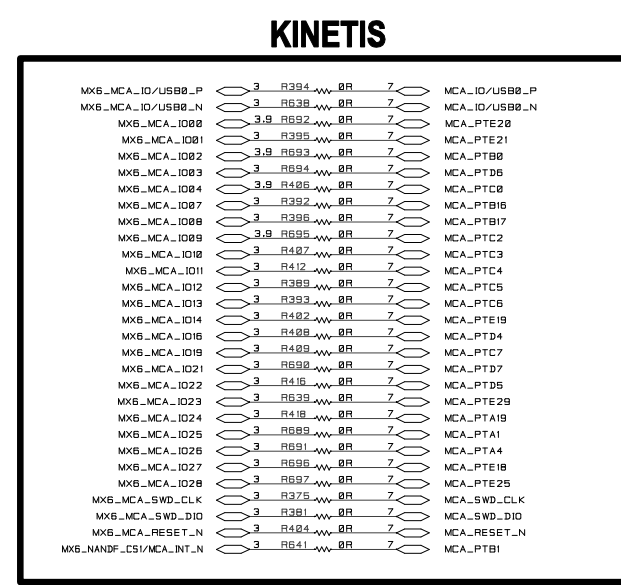
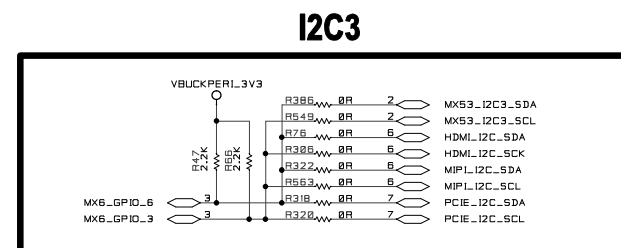
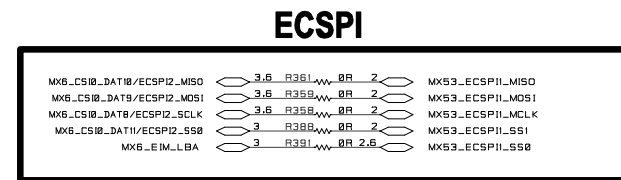
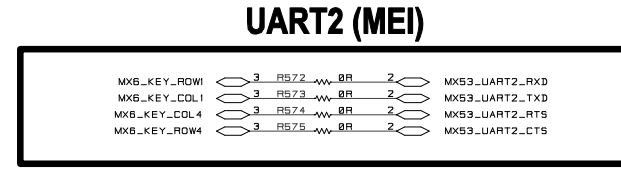
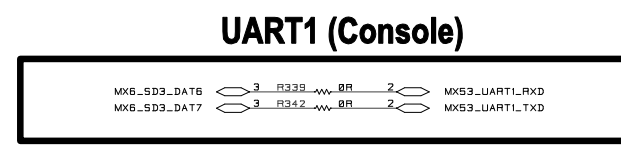
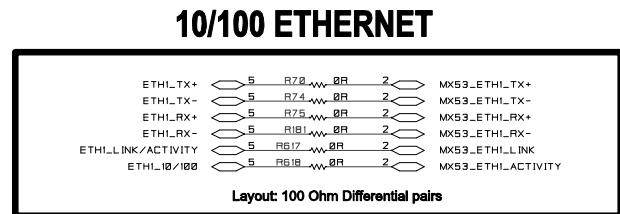
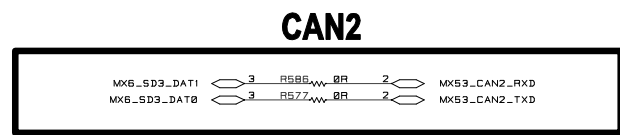
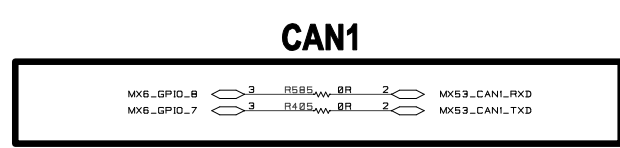
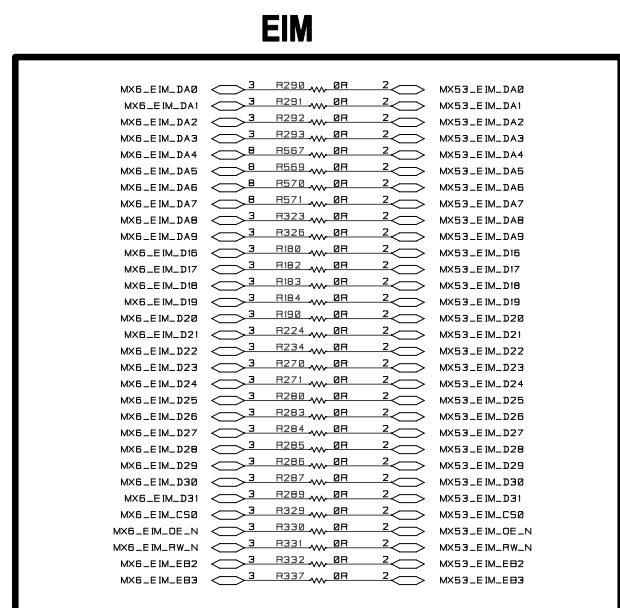
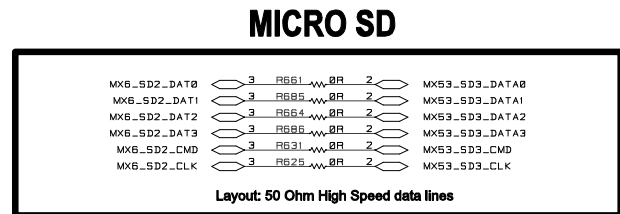
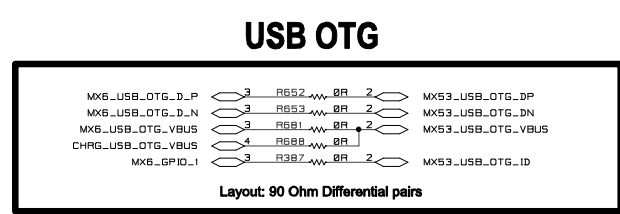
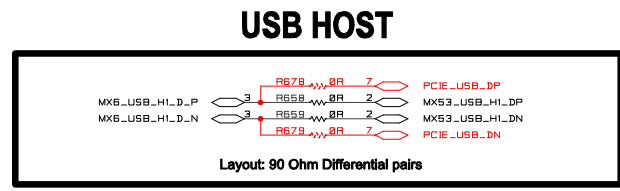
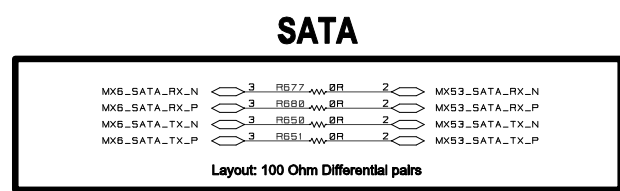
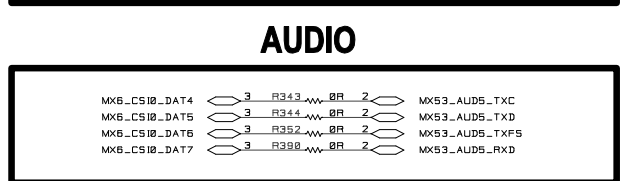
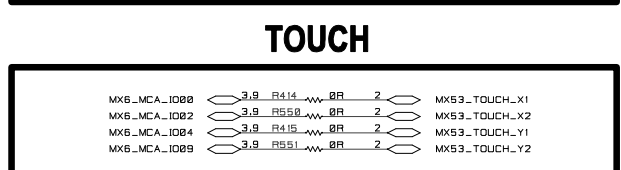
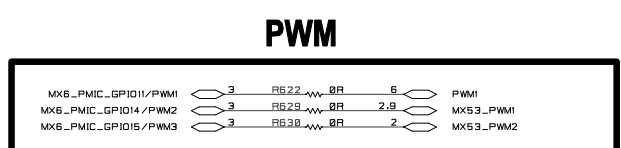
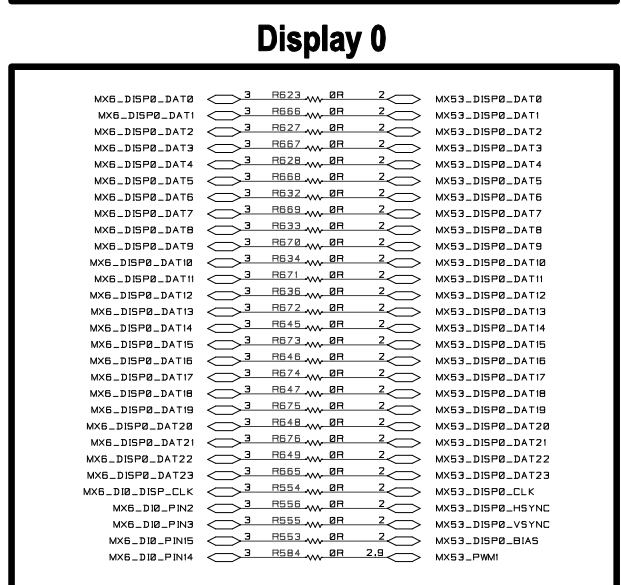
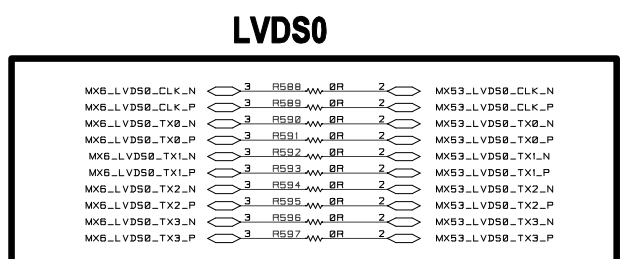
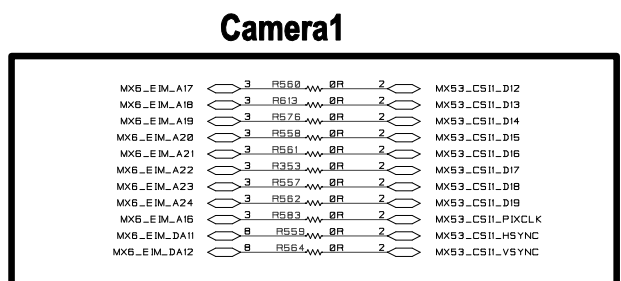
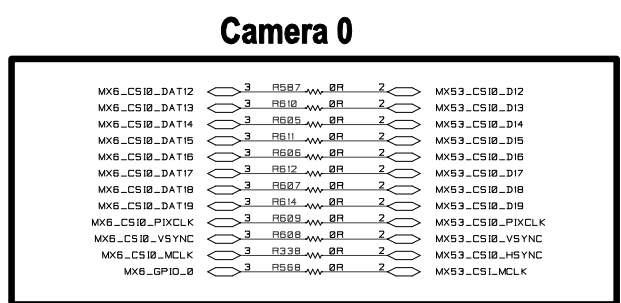
Boot Configuration



Boot Source	SW5-4	SW5-3	SW5-2	SW5-1
eMMC (default)	Open	Open	1-bit : Close - Close 4-bit : Close - Open 8-bit : Open - Close	
SD2	Open	Close	X	1-bit : Close 4-bit : Open
SATA	Close	Open	X	X

Usable for:				Filename: 300H53x-01_A.scm	
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				Title: Boot Configuration	
				Partnumber: 55001794-01	
				Sheet of 10	
IP	NPR003679	13.03.2014	DA		
B1	RevA: Initial Layout	16.10.2013	DA		
Rev.	Modification	Date	Name		





GPIO TABLE

Signal Name	IOMUX	GPIO	Use
MX6_NANDF_D0	ALT5	GPIO2_0	MX53_AUDIO_HP_DET
MX6_NANDF_D1	ALT5	GPIO2_1	MX53_PEN_IRQ_N
MX6_NANDF_D2	ALT5	GPIO2_2	MX53_USER_LED1
MX6_NANDF_D3	ALT5	GPIO2_3	MX53_USER_LED2
MX6_NANDF_D4	ALT5	GPIO2_4	MX53_USER_KEY1
MX6_NANDF_D5	ALT5	GPIO2_5	MX53_USER_KEY2
MX6_NANDF_D6	ALT5	GPIO2_6	MX53_EIM_IRQ
MX6_NANDF_D7	ALT5	GPIO2_7	MX53_DIGIO0
MX6_EIM_CS1	ALT5	GPIO2_24	MX53_DIGIO1
MX6_EIM_EB0	ALT5	GPIO2_28	MX53_DIGIO2
MX6_EIM_EB1	ALT5	GPIO2_29	MX53_DIGIO3
MX6_EIM_DA10	ALT5	GPIO3_10	MX53_USB_HUB_RESET_N
MX6_EIM_DA15	ALT5	GPIO3_15	MX53_CS1_RESET_NKEY_COL7
MX6_EIM_WAIT	ALT5	GPIO5_0	MX53_CS10_RESET_NKEY_ROW7
MX6_NANDF_ALE	ALT5	GPIO6_8	CHRG_UOK_N
MX6_NANDF_RB0	ALT5	GPIO6_10	CHRG_STATUS_N
MX6_NANDF_CS2	ALT5	GPIO6_15	CHRG_FAULT_N
MX6_NANDF_CS3	ALT5	GPIO6_16	CHRG_DOK_N
MX6_EIM_BCLK	ALT5	GPIO6_31	MIPI_BACKLGT_ON
MX6_SD3_DAT2	ALT5	GPIO7_6	MIPI_GPIO
MX6_SD3_DAT3	ALT5	GPIO7_7	PCIE_WAKE_N
MX6_SD3_RST	ALT5	GPIO7_8	PCIE_RESET_N
MX6_GPIO_16	ALT5	GPIO7_11	MX6_LVDS1_PEN_IRQ_N


I2C2 Bus

Peripheral	Speed (Kbps)	Voltage	Addresses	Default Address
Kinetis (I2C0)	400 (*)	LDO3 (3.3V)	TBD (SW configurable)	TBD (SW configurable)
PMIC	400	LDO3 (3.3V)	SW configurable	Write: 0xB0 Read: 0xB1
Module Connector (**)	400 (*)	GEN_3V3 (3.3V)		

(*) At 400kbps the maximum bus loading does not comply with I2C specifications.
(**) This bus should not be used by external devices unless necessary.

I2C3 Bus

Peripheral	Speed (Kbps)	Voltage	Addresses	Default Address
HDMI EDID	100	GEN_3V3 (3.3V)	0x50	0x50
MIPI Camera	400	GEN_3V3 (3.3V)	0x3C	0x3C
MIPI Display	TBD	GEN_3V3 (3.3V)	TBD	TBD
PCIe	TBD	GEN_3V3 (3.3V)	TBD	TBD
CSI Camera 1	400	GEN_3V3 (3.3V)	Write: 0xB8 Read: 0xB9	Write: 0xB8 Read: 0xB9
CSI Camera 2	400	GEN_3V3 (3.3V)	Write: 0x90 Read: 0x91	Write: 0x90 Read: 0x91
Parallel LCD	TBD	GEN_3V3 (3.3V)	TBD	TBD
Audio CODEC	400	GEN_3V3 (3.3V)	Write: 0x14 Read: 0x15	Write: 0x14 Read: 0x15
Peripheral Connector	TBD	GEN_3V3 (3.3V)	TBD	TBD
RTC	400	GEN_3V3 (3.3V)	Write: 0xAC Read: 0xAD	Write: 0xAC Read: 0xAD

Usable for:				Filename: 300459x-01_A.scm	
				CCWMX6_MX53_ADPT PCA: CCWMX6_ADPT	
				Title: GPIO and I2C tables	
				Partnumber: 55001794-01	
				Sheet of 10	
				Provided for: Provided by:	
IP	NPR003679	13.03.2014	DA		
81	RevA: Initial Layout	16.10.2013	DA		
Rev.	Modification	Date	Name		

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A												
B												
C												
D												
E												
F												
G												
H												

TXT1 35017901
 LABEL TEXT
 LBL1 28000351
 LABEL
 PCB1 30014592-01
 PCB
 E1 30014590-01
 FINISH

Usable for:							Filename: 3001459x-01_A.scm	
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				Designer	Date	Name	Title:	
				DA	16.10.2013	DA		
				Approved				
				ISO				
							Partnumber:	Sheet
							55001794-01	of 10
Rev.	Modification	Date	Name				Provided for:	Provided by:
01	RevA: Initial Layout	16.10.2013	DA					
IP	NPR003679	13.03.2014	DA					

