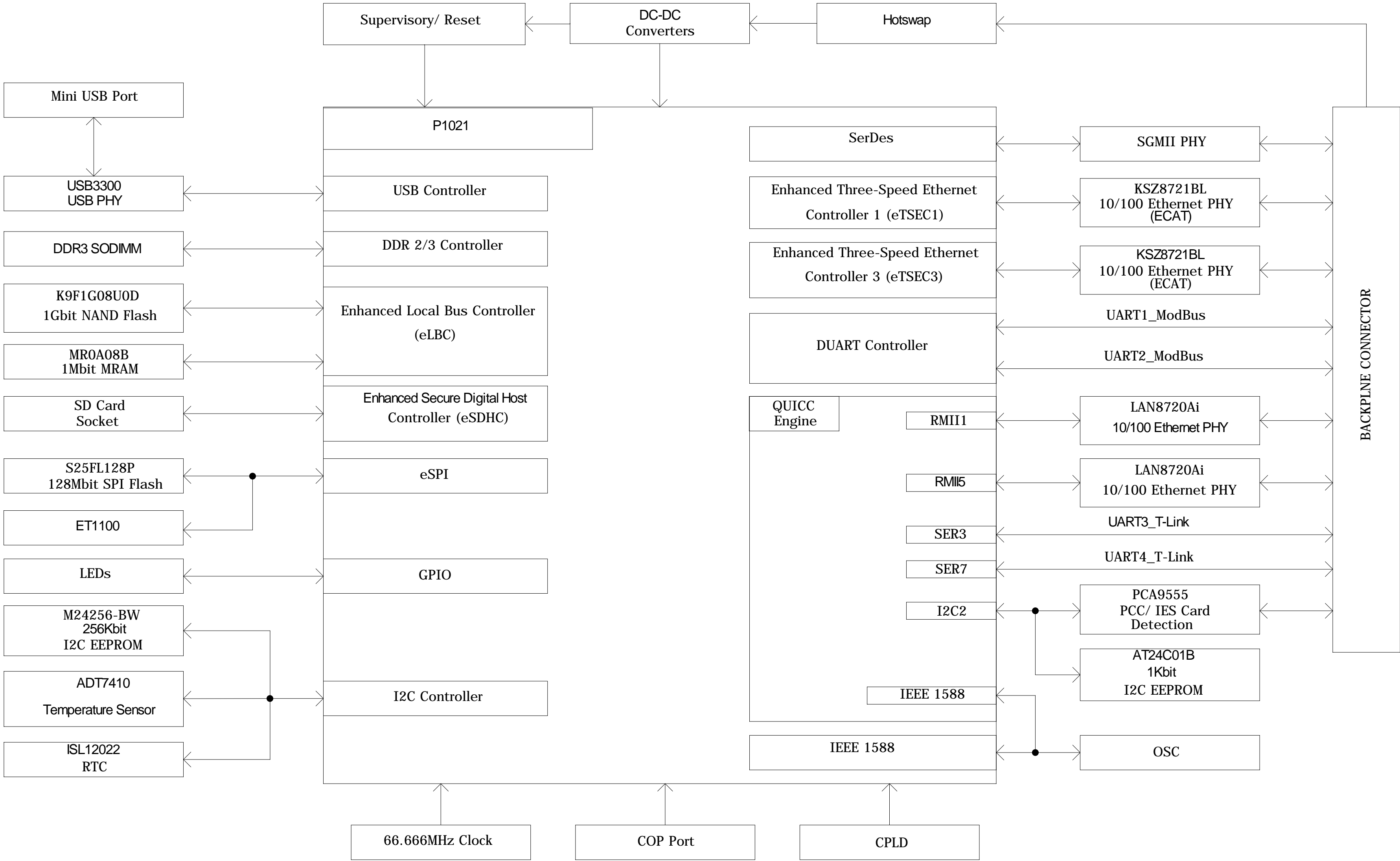


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REVISION HISTORY												SHEETS																																																																									
<table><thead><tr><th>REV</th><th>DATE</th><th>AUTHOR</th><th>CHANGES</th></tr></thead><tbody><tr><td>1.0</td><td>17 JULY 2011</td><td>Akhilesh</td><td></td></tr><tr><td>1.1</td><td>20 JULY 2011</td><td>Akhilesh</td><td>R404 and net CLK_CPLD_66M added U53 changed to 25MHz part U3 Address connections updated R405 and R406 added GND connection from J6-C1 removed</td></tr></tbody></table>												REV	DATE	AUTHOR	CHANGES	1.0	17 JULY 2011	Akhilesh		1.1	20 JULY 2011	Akhilesh	R404 and net CLK_CPLD_66M added U53 changed to 25MHz part U3 Address connections updated R405 and R406 added GND connection from J6-C1 removed	<ol style="list-style-type: none">MAINBLOCK DIAGRAM 1BLOCK DIAGRAM 2P1021_DDR3 MEMORYP1021_FLASH INTERFACEP1021_SYSTEM CONTROLETHERNET_EECETHERNET_IES_ECATGIGABIT ETHERNETI2C_SPI_SD-CARDET1100USB_SERIALP1021_POWERPOWER ON STRAPPING - 1POWER ON STRAPPING - 2CPLD_HOT SWAP_LEDPOWER SUPPLYBACKPLANE INTERFACE																																																													
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<table><thead><tr><th colspan="2">APPROVALS</th><th>DATE</th><th colspan="9">COMPRESSOR CONTROLS CORPORATION</th></tr></thead><tbody><tr><td colspan="2">DRAWN AKHILESH JAISWAL</td><td>20-JULY-2011</td><td colspan="9">4725 121st Street - Des Moines, Iowa 50323</td></tr><tr><td colspan="2">CHECKED</td><td></td><td colspan="9"></td></tr><tr><td colspan="2">ENGINEER</td><td></td><td>SIZE C</td><td colspan="5">DWG. NO. 18-600400-001</td><td colspan="2">SHEET 1</td><td colspan="2">PROD REV. 1.1</td></tr><tr><td colspan="2"></td><td></td><td></td><td colspan="5">FILE APP CARD SCHEMATIC</td><td colspan="2">SCALE</td><td colspan="2"></td></tr></tbody></table>												APPROVALS		DATE	COMPRESSOR CONTROLS CORPORATION									DRAWN AKHILESH JAISWAL		20-JULY-2011	4725 121st Street - Des Moines, Iowa 50323									CHECKED												ENGINEER			SIZE C	DWG. NO. 18-600400-001					SHEET 1		PROD REV. 1.1						FILE APP CARD SCHEMATIC					SCALE															
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				FILE APP CARD SCHEMATIC					SCALE																																																																												
1		2		3		4			5		6																																																																										

BLOCK DIAGRAM



1.1

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			FILE APP CARD SCHEMATIC		SCALE	

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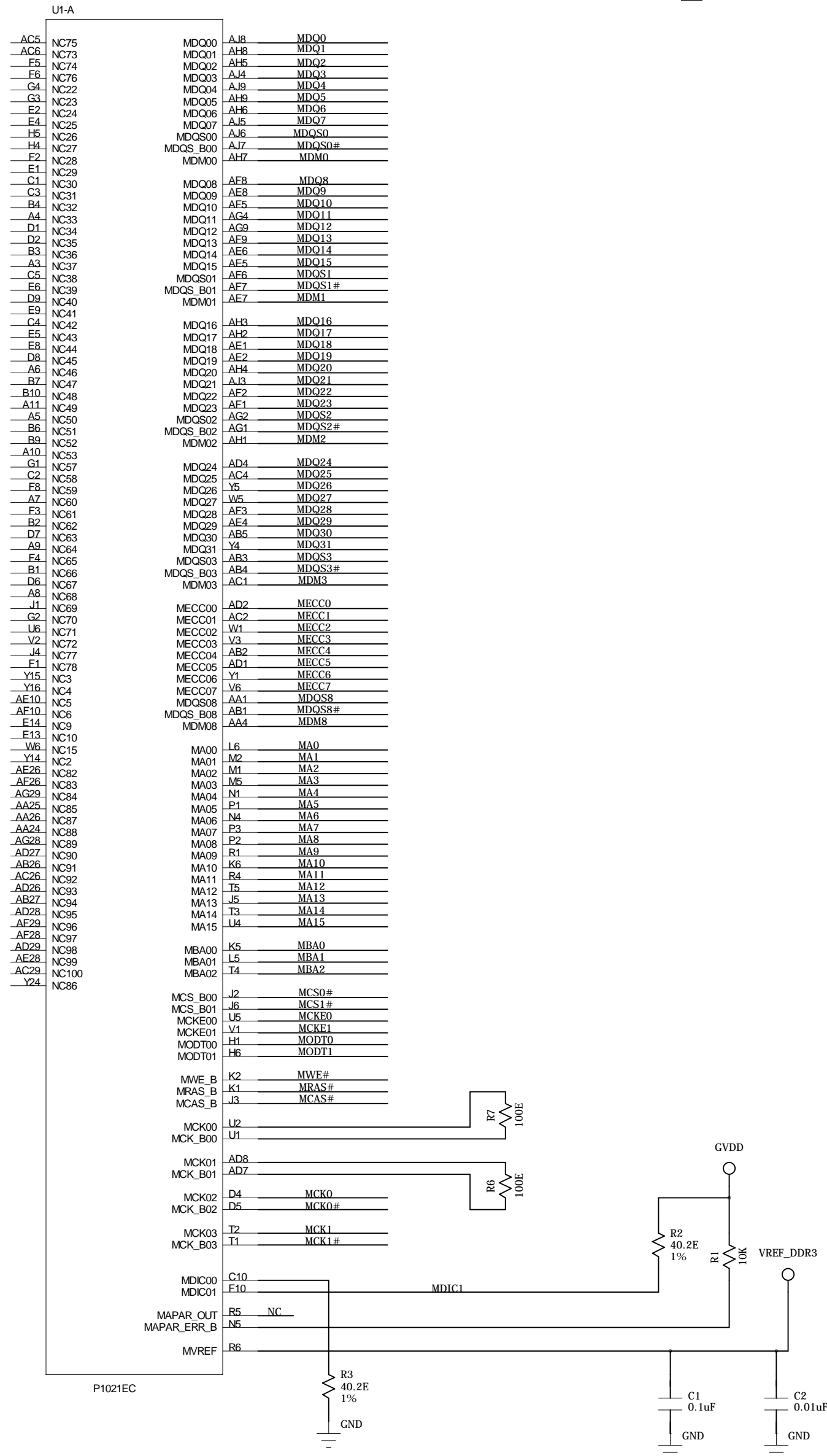
DWG. NO.

SH

REV.

P1021_DDR3

DDR3 SODIMM



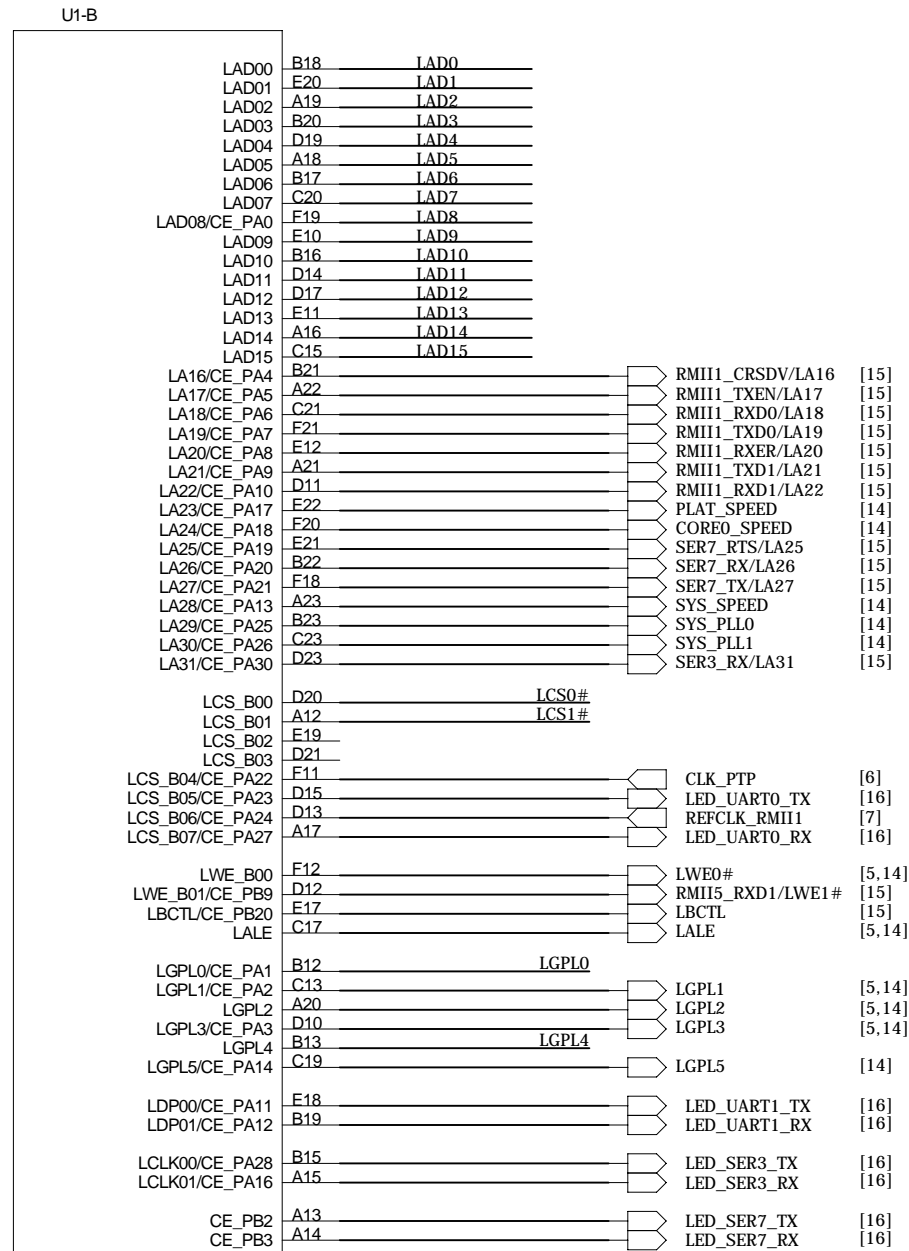
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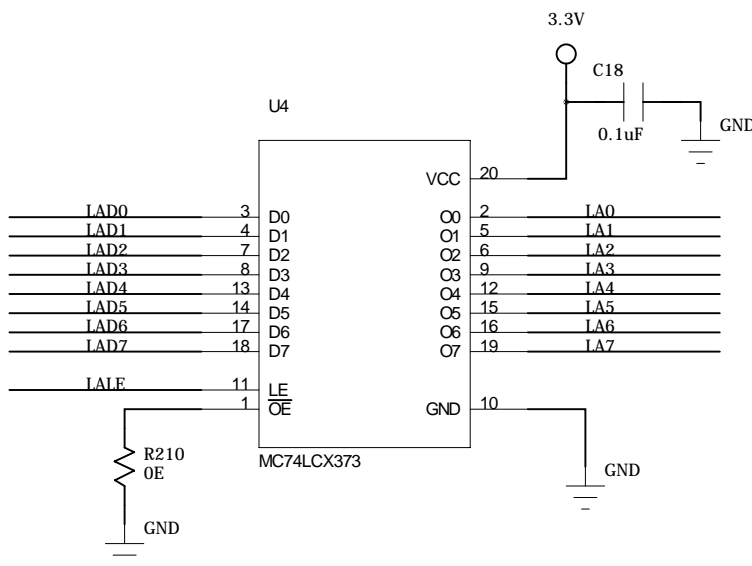
REV.

P1021_LOCAL BUS



P1021EC

LOCAL BUS LATCH



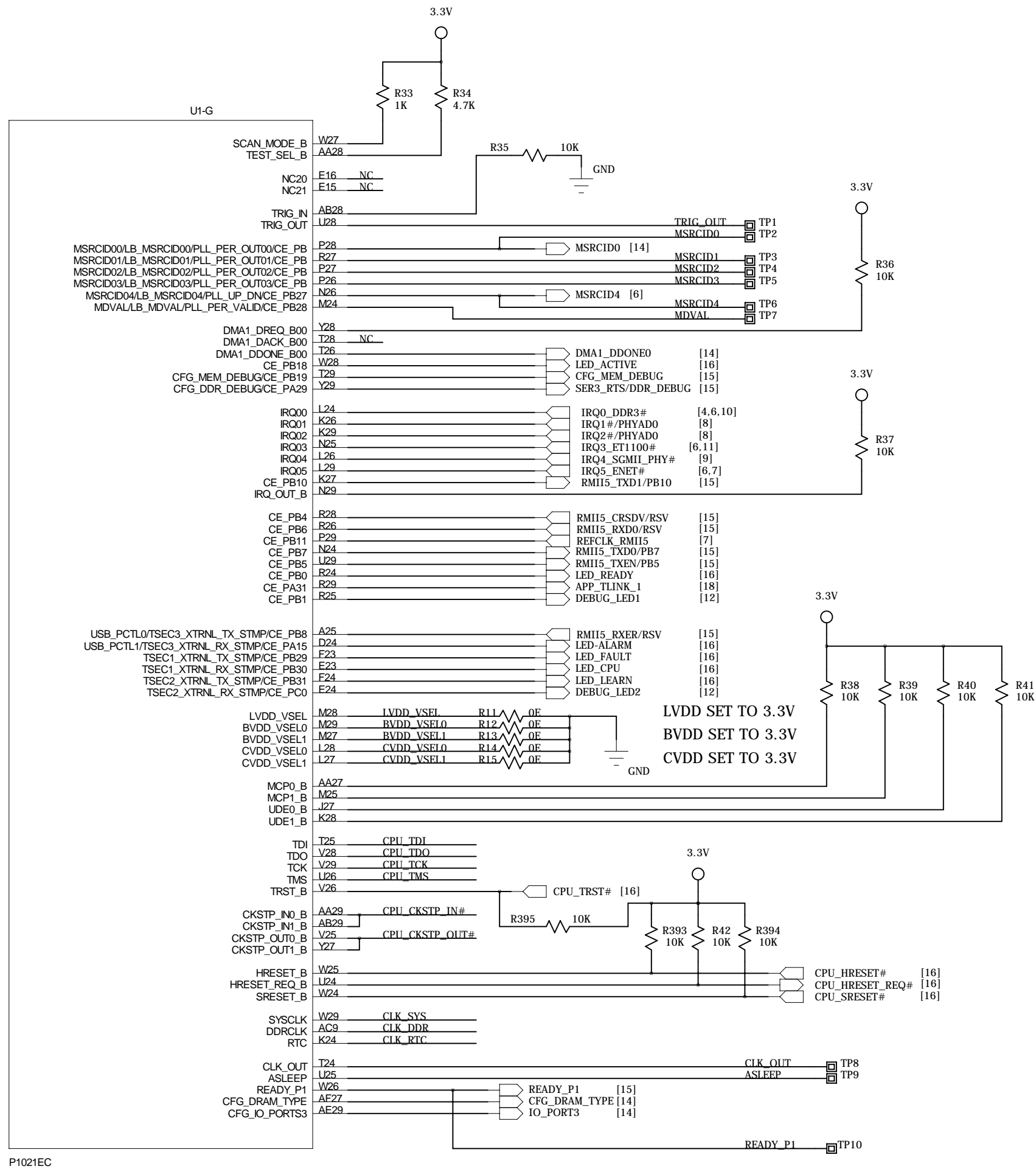
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DWG. NO.

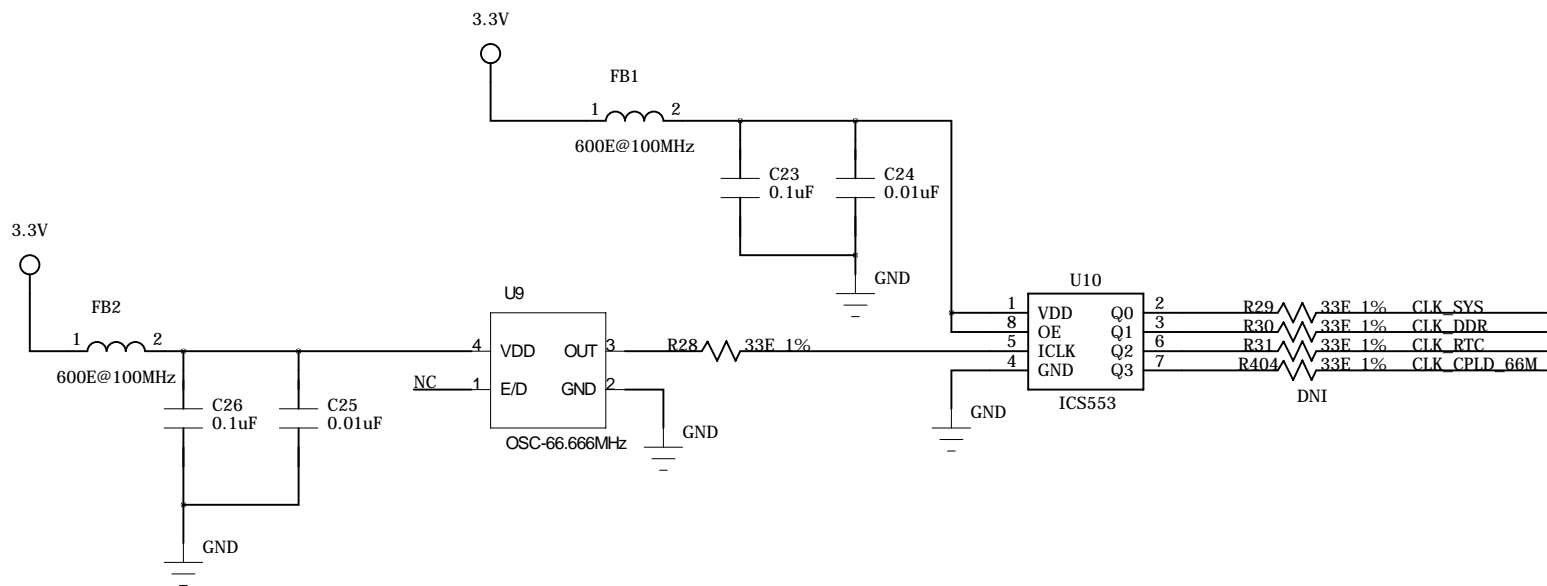
SH

REV.

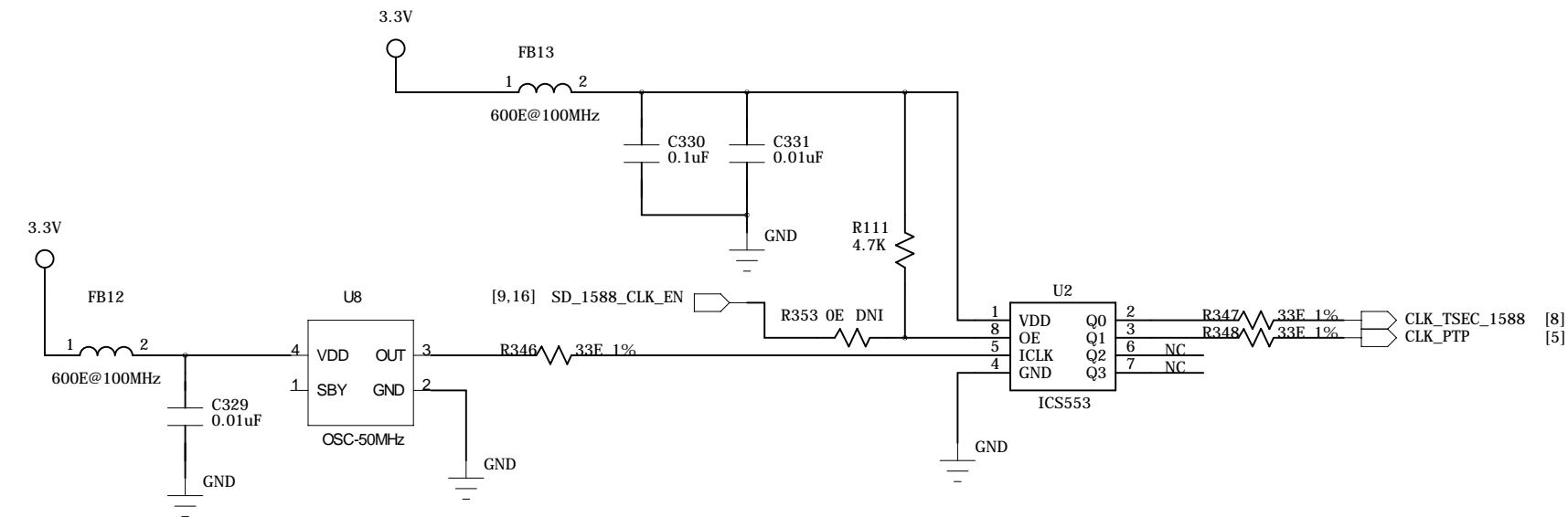
P1021_SYSTEM CONTROL



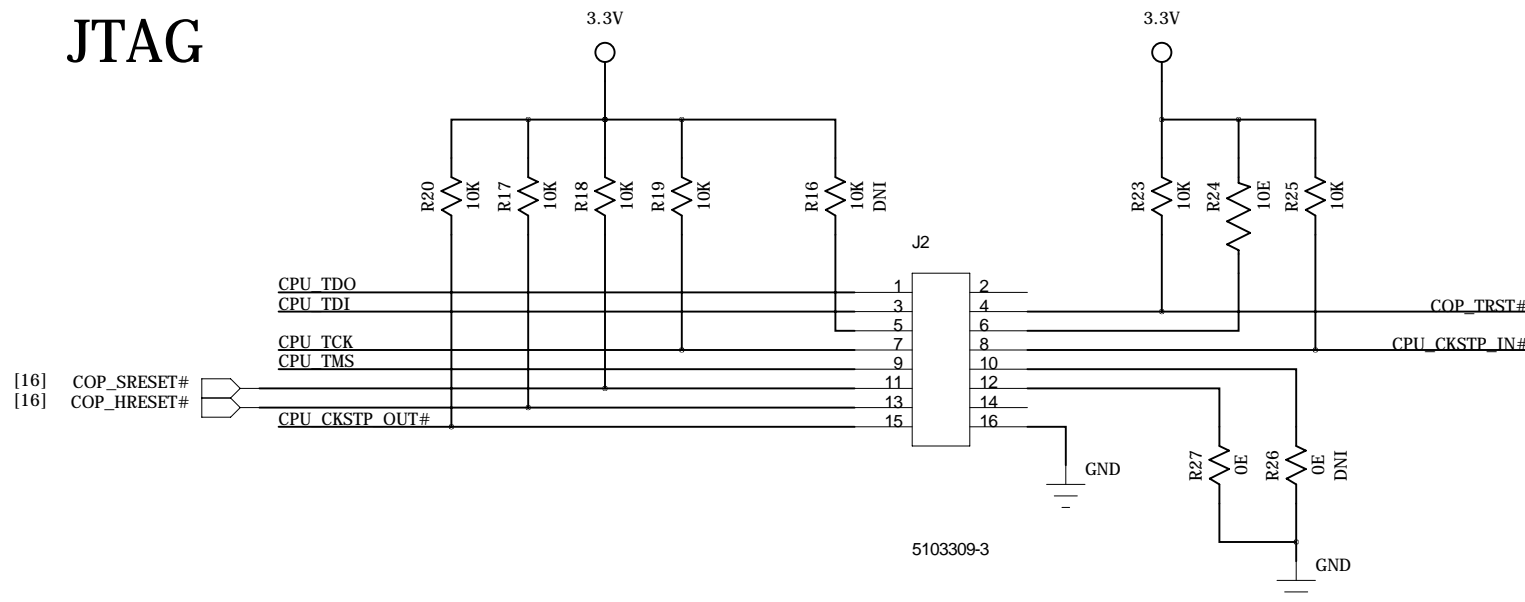
SYSTEM CLOCK



IEEE-1588 CLOCK



JTAG



APPROVALS

DATE

COMPRESSOR CONTROLS CORPORATION

4725 121st Street - Des Moines, Iowa 50323

DRAWN

AKHILESH JAISWAL

20-JULY-2011

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DWG. NO.

18-600400-001

SHEET

6

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REV.

1.1

FILE

APP CARD SCHEMATIC

SCALE

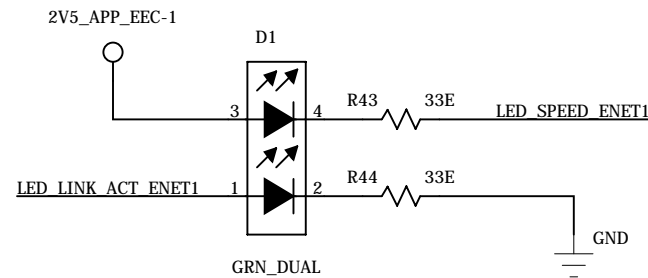
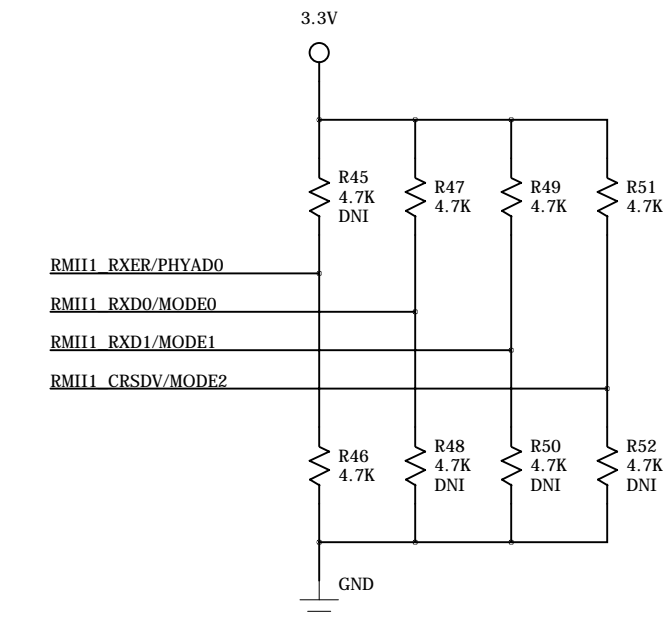
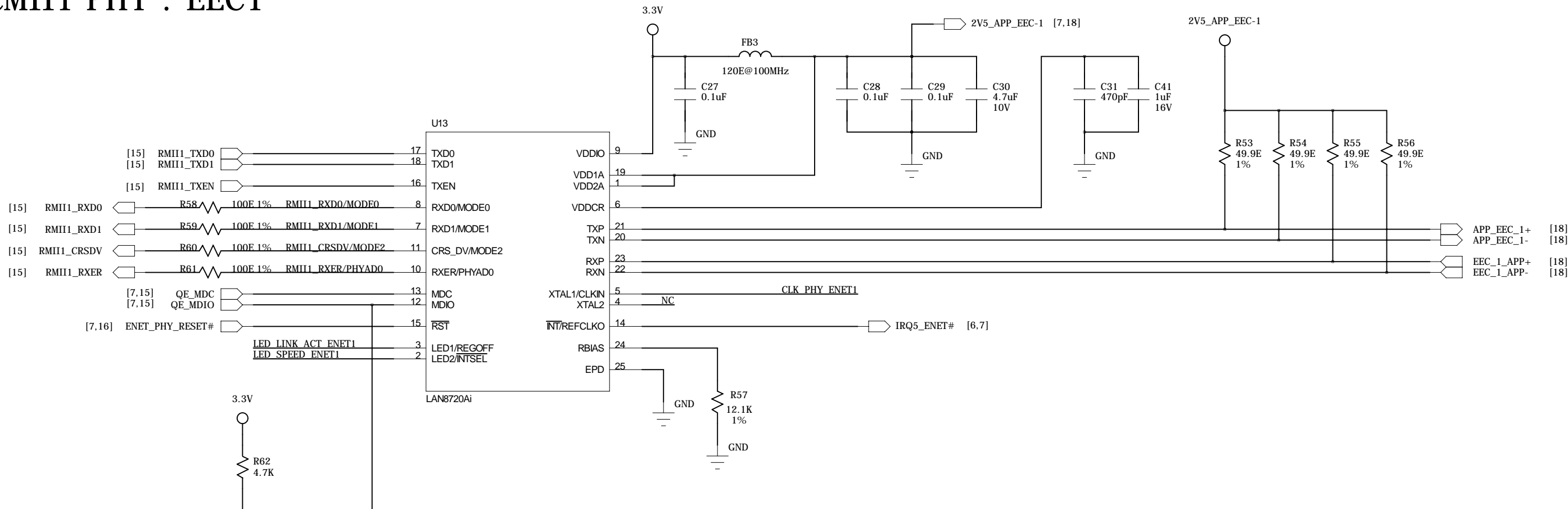
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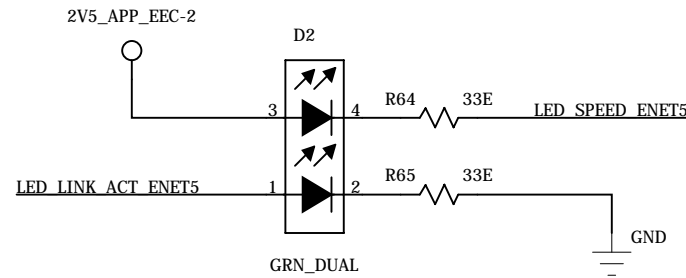
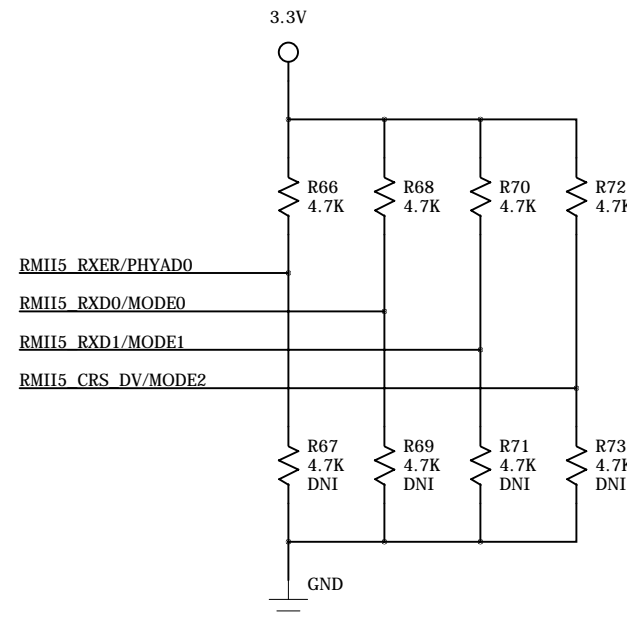
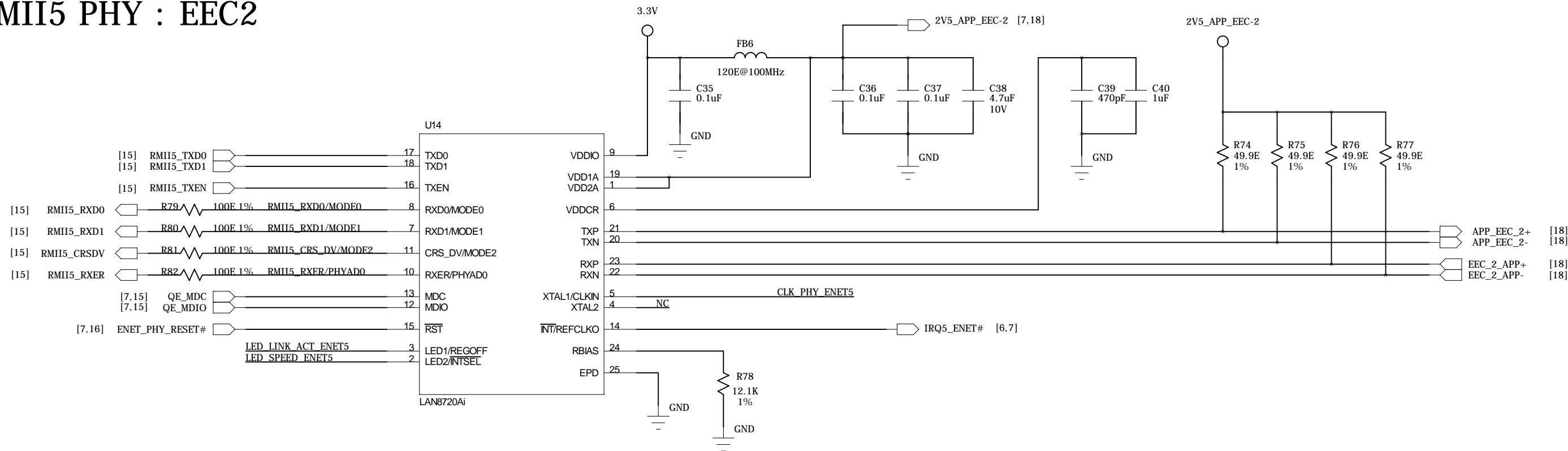
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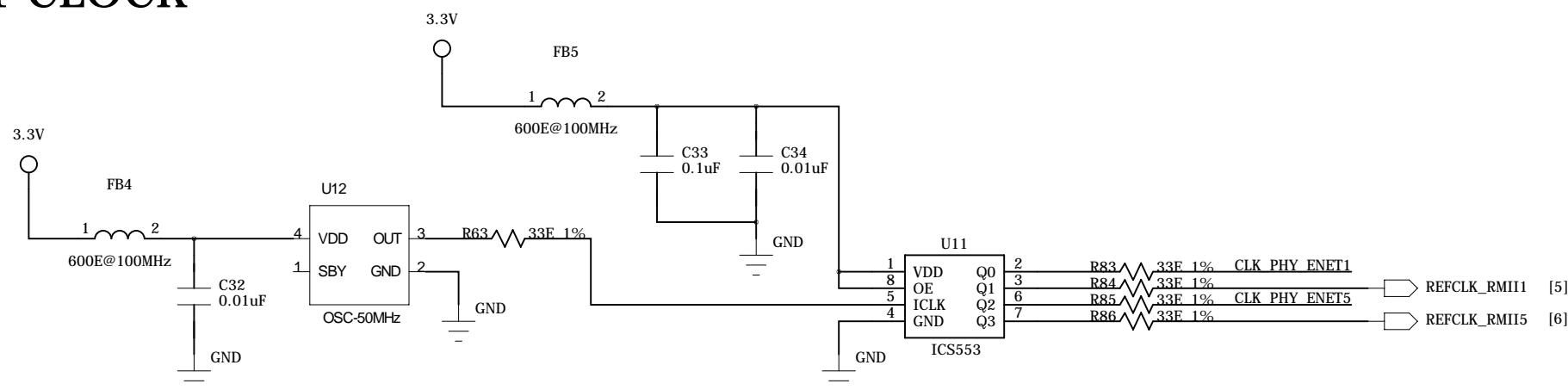
RMII1 PHY : EEC1



RMII5 PHY : EEC2



RMII CLOCK



APPROVALS

DATE

COMPRESSOR CONTROLS CORPORATION

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18-600400-001

FILE

APP CARD SCHEMATIC

SHEET

7

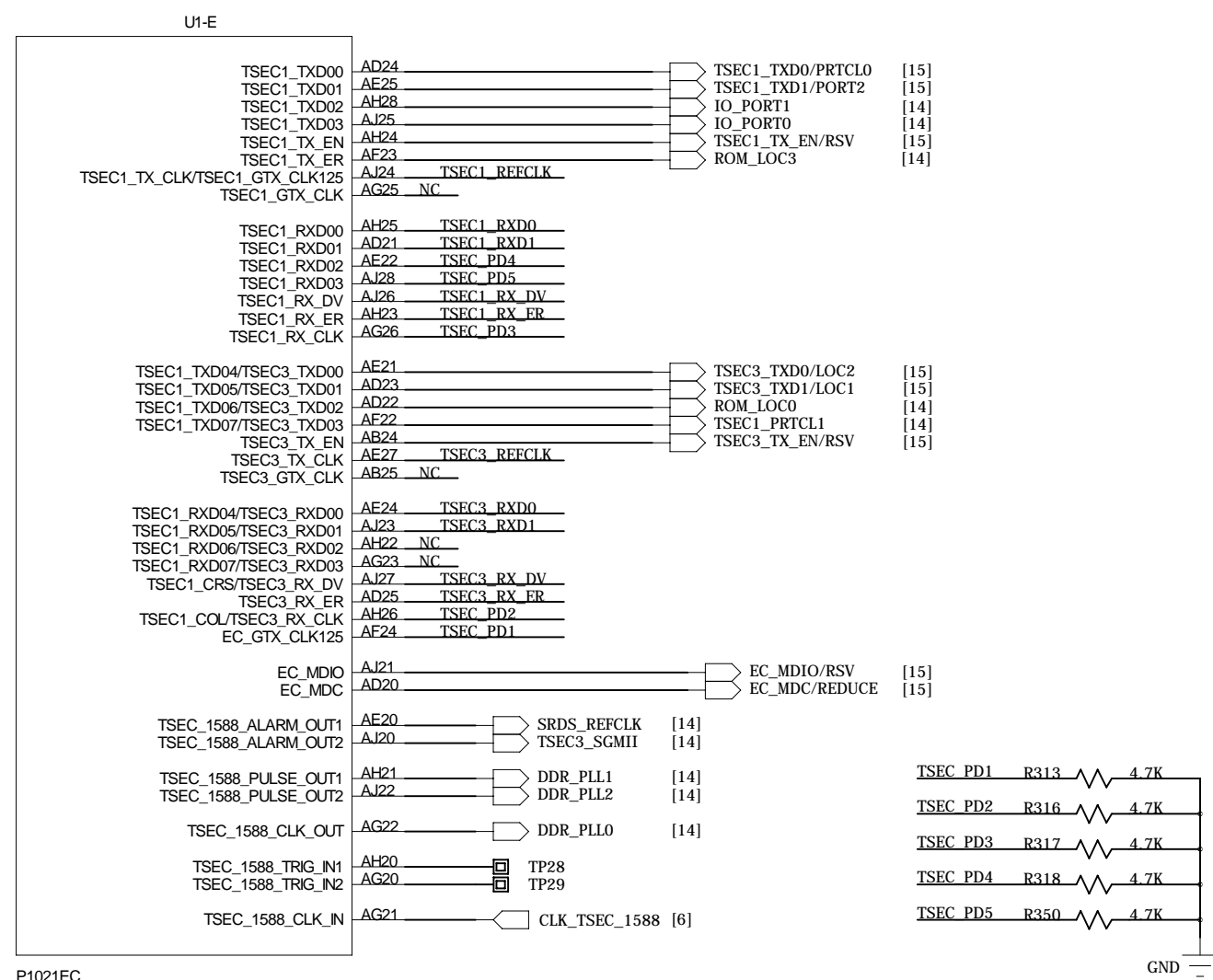
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PROD

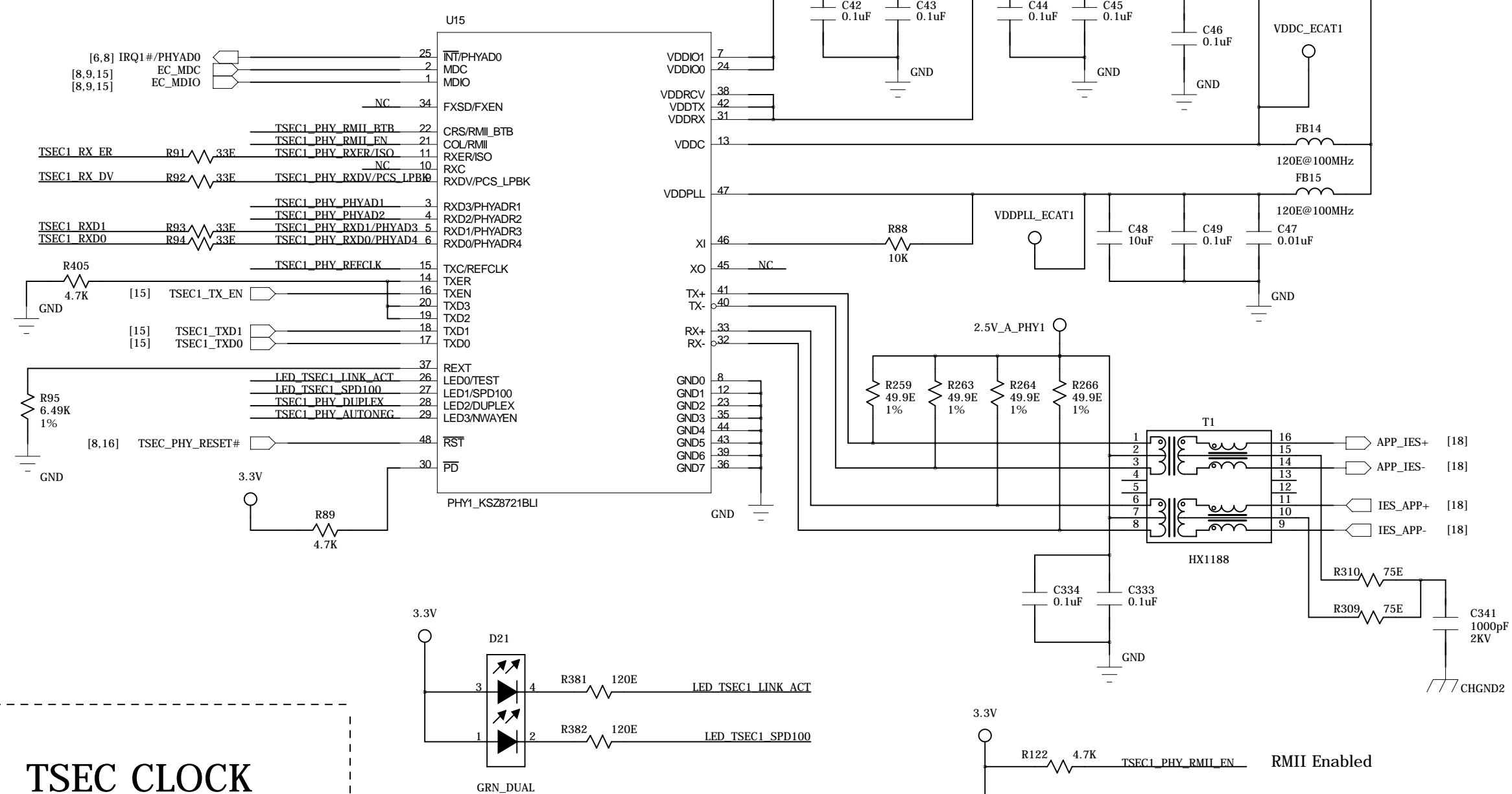
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1.1

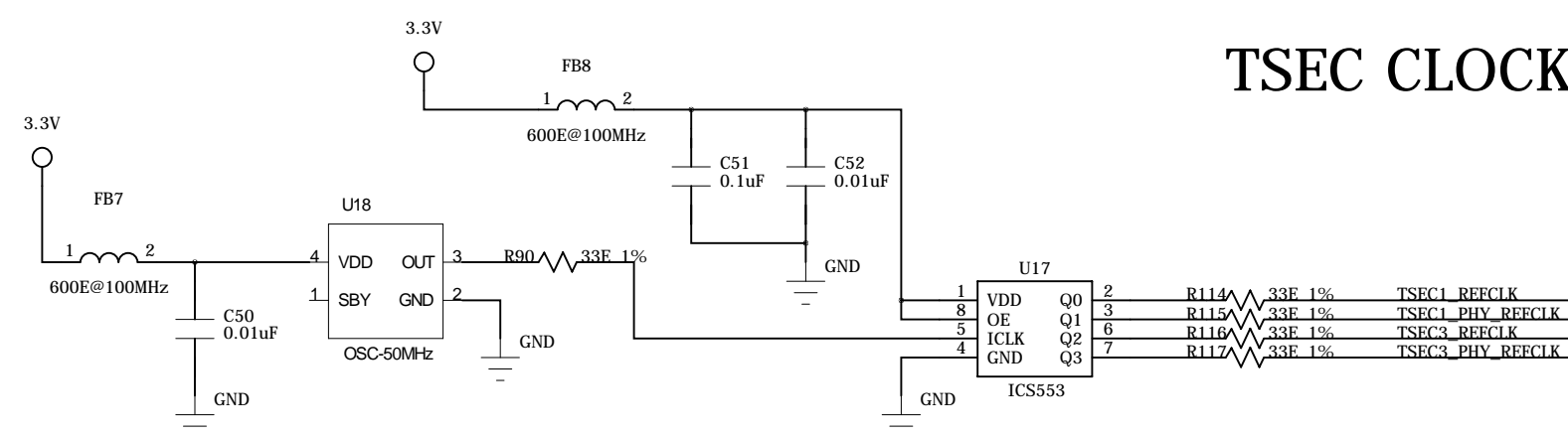
P1021_TSEC



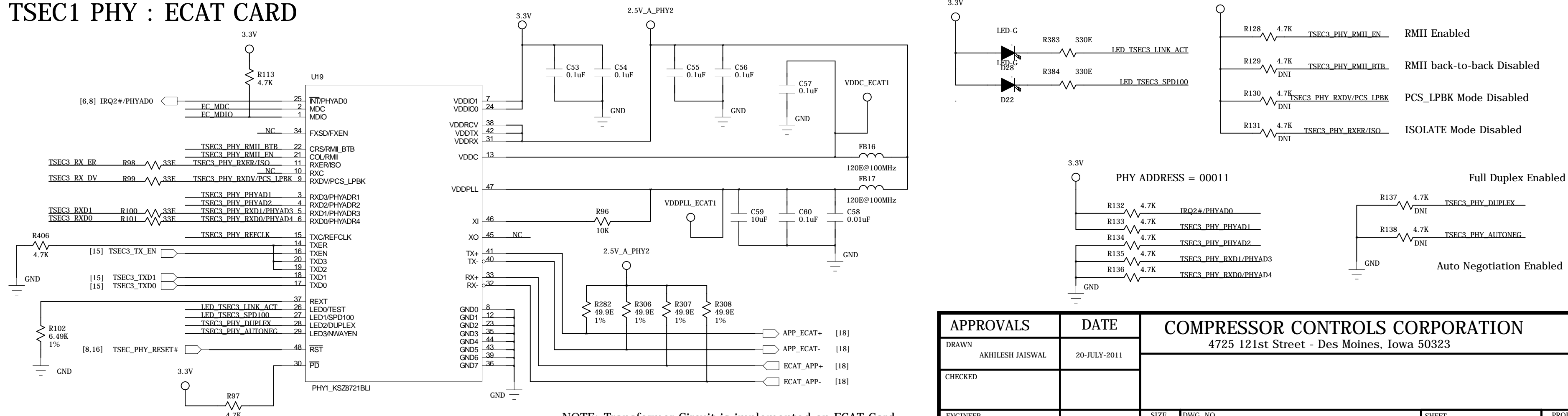
TSEC1 PHY : IES CARD



TSEC CLOCK



TSEC1 PHY : ECAT CARD



NOTE: Transformer Circuit is implemented on ECAT Card

APPROVALS		DATE		COMPRESSOR CONTROLS CORPORATION			
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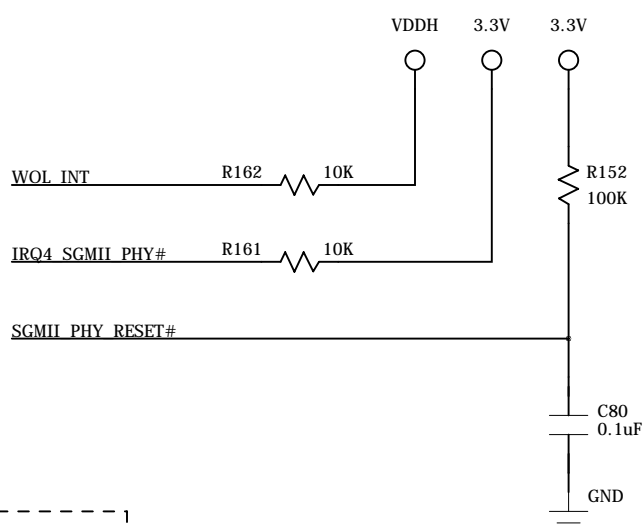
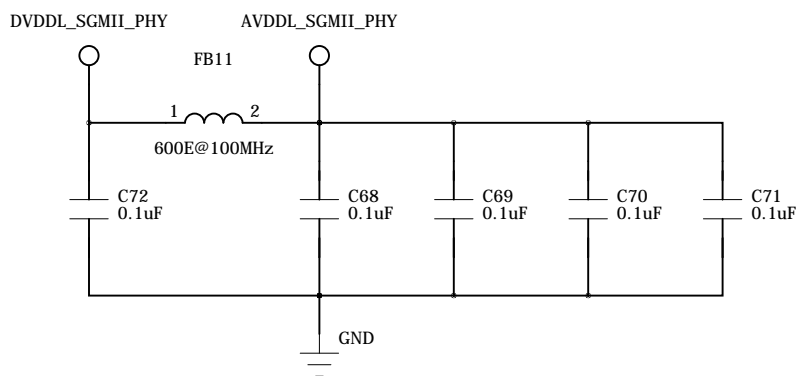
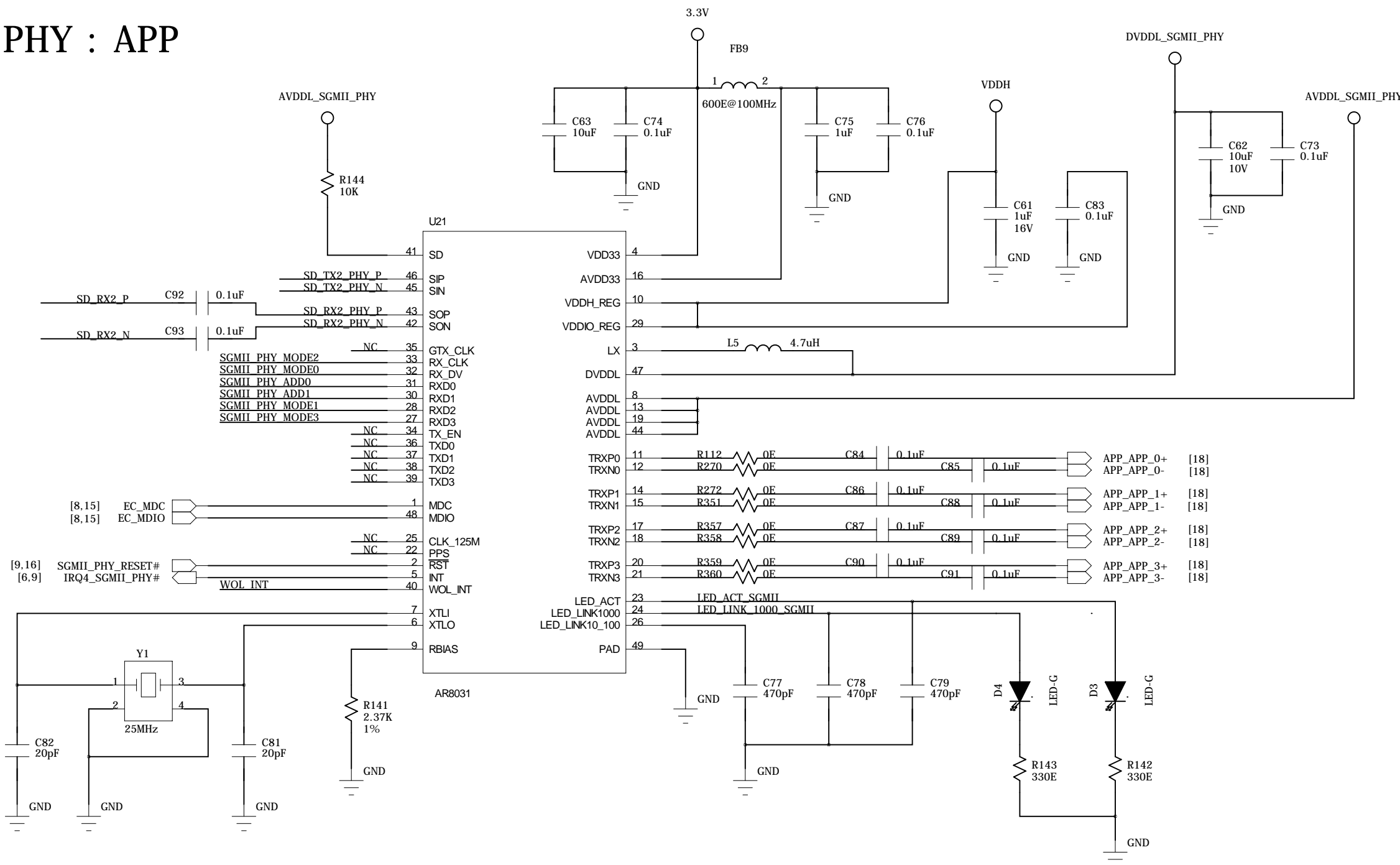
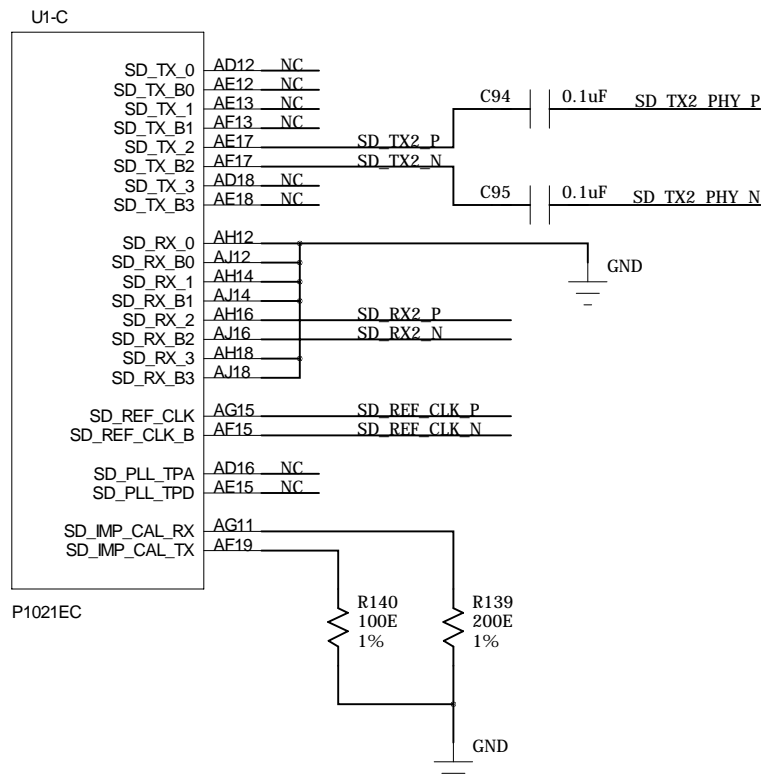
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SH

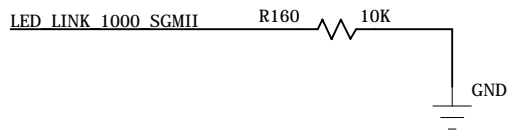
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SGMII PHY : APP

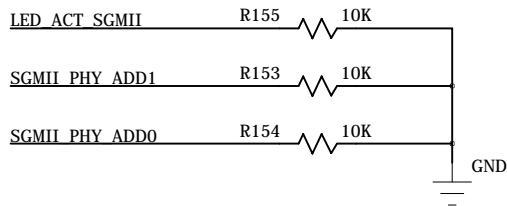
P1021_SGMII



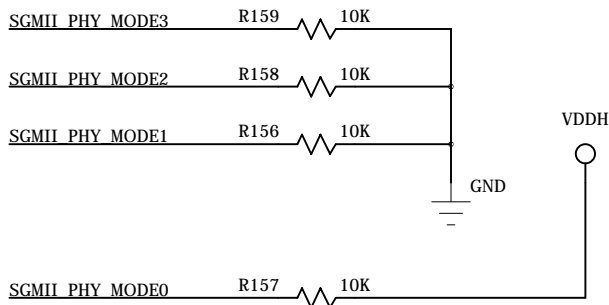
Interrupt Function Enabled on Pin - 5



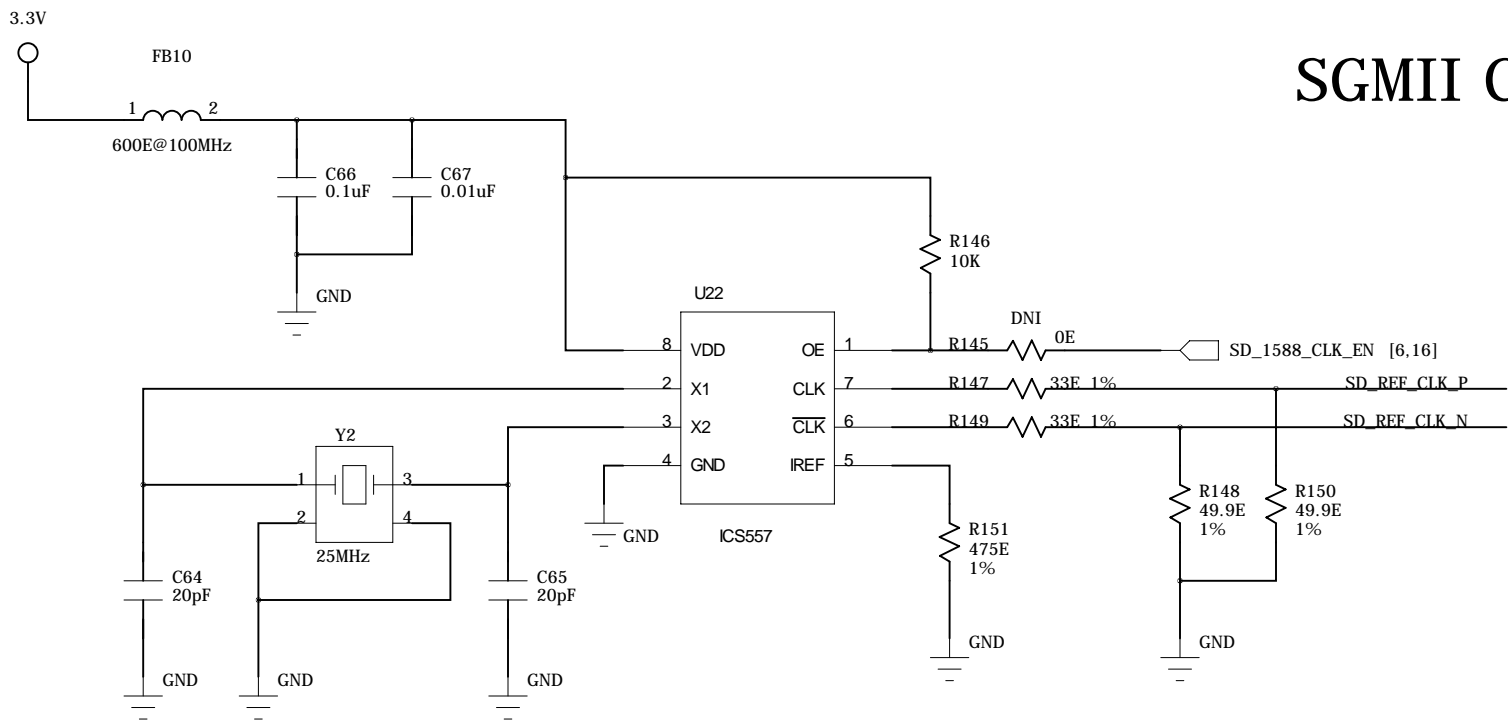
PHY Address Bit [2:0] : 000



AR8031 Mode : 1000 BASE-T, SGMII



SGMII CLOCK



APPROVALS

DATE

COMPRESSOR CONTROLS CORPORATION

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DWG. NO.

18-600400-001

FILE

APP CARD SCHEMATIC

SHEET

9

SCALE

PROD

REV.

1.1

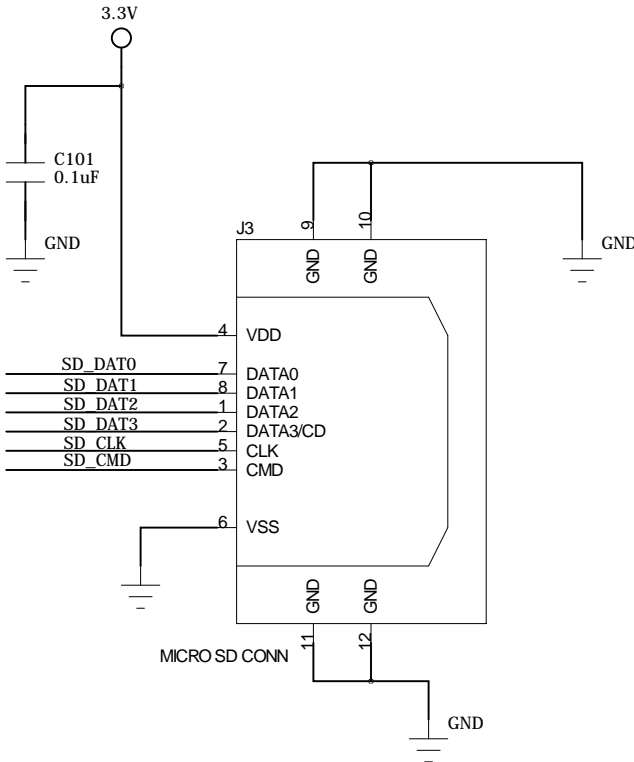
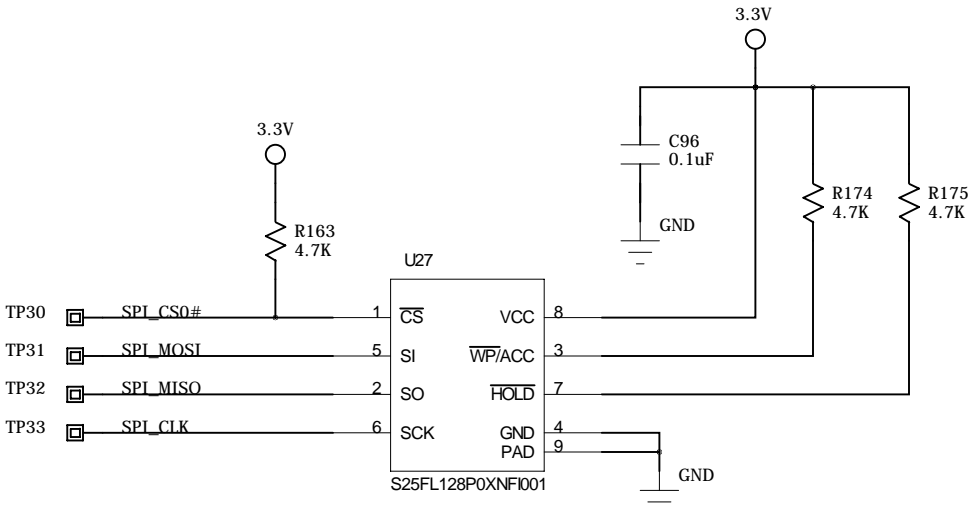
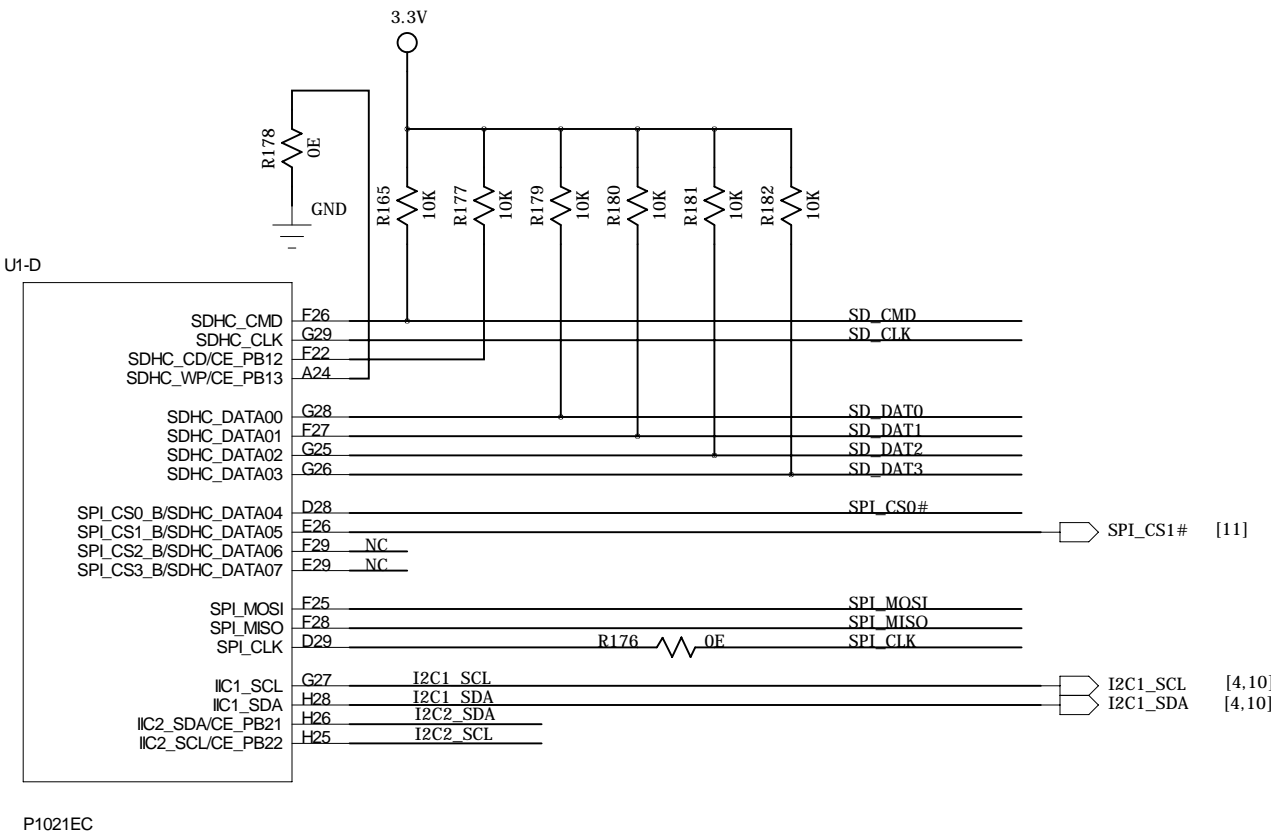
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DWG. NO. SH REV.

P1021_SPI_I2C

SPI FLASH : 128MBIT

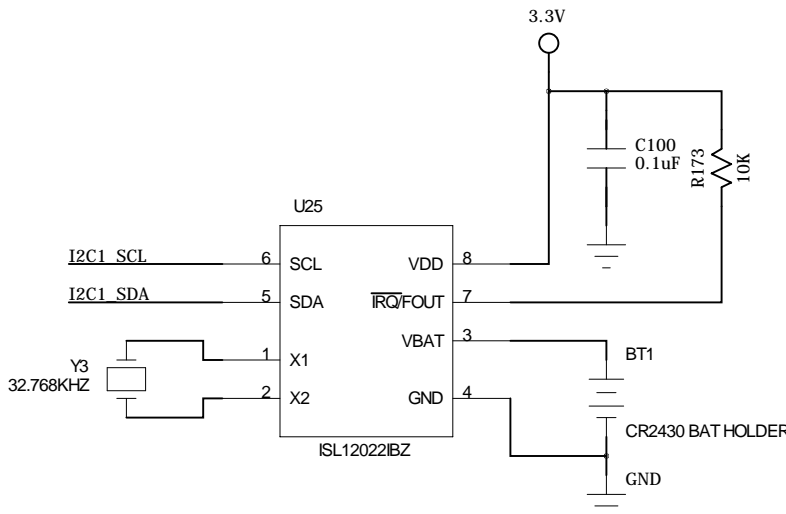
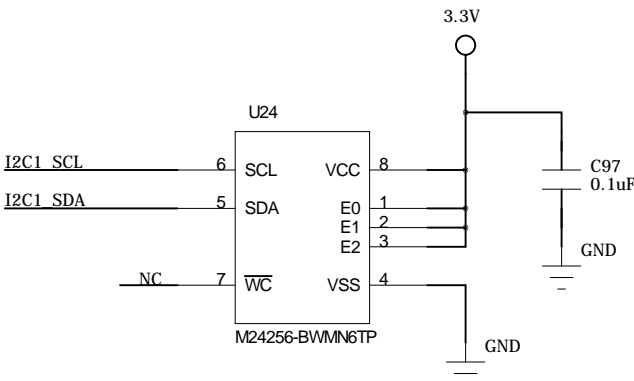
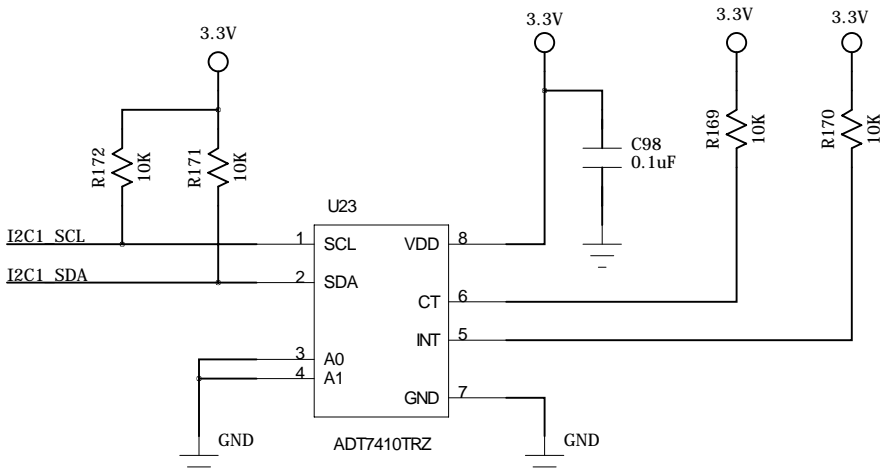
SD CARD SOCKET



TEMPERATURE SENSOR

BOOT EEPROM : 256KBIT

RTC



TEMPERATURE SENSOR I2C ADDRESS: 0x48

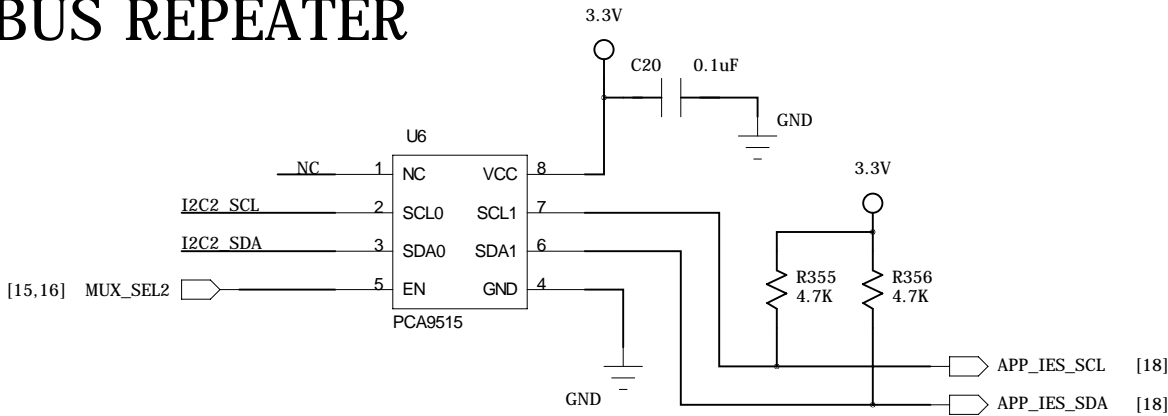
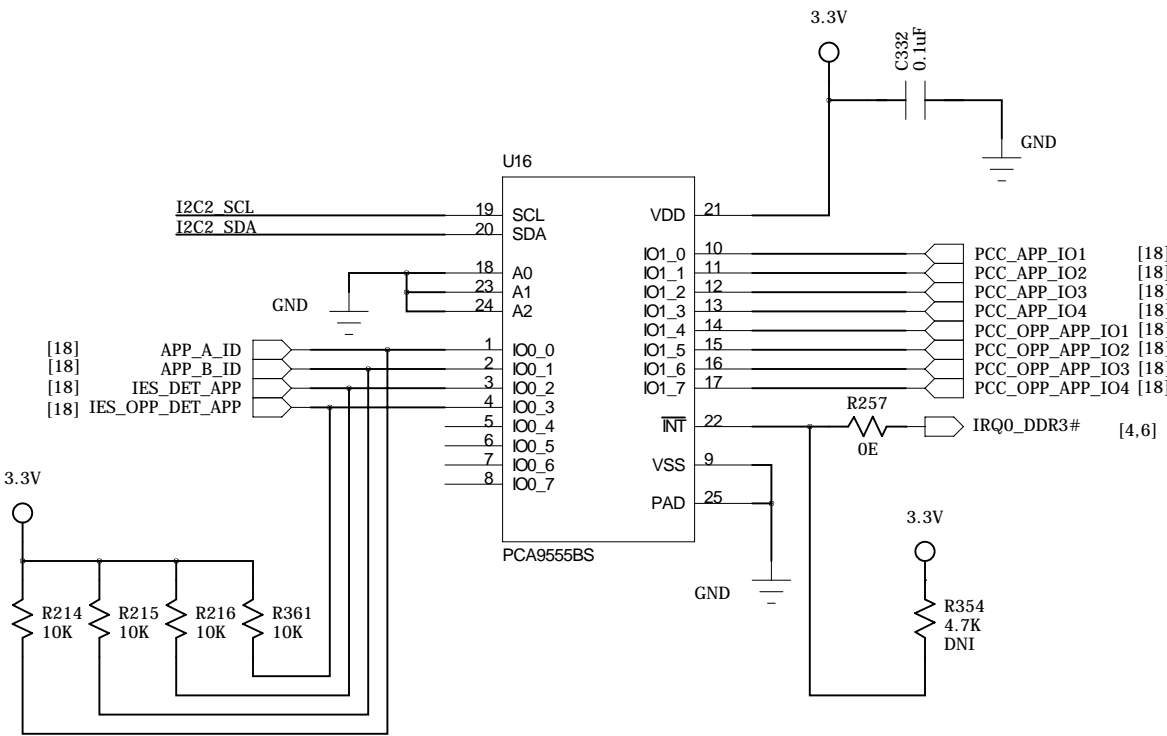
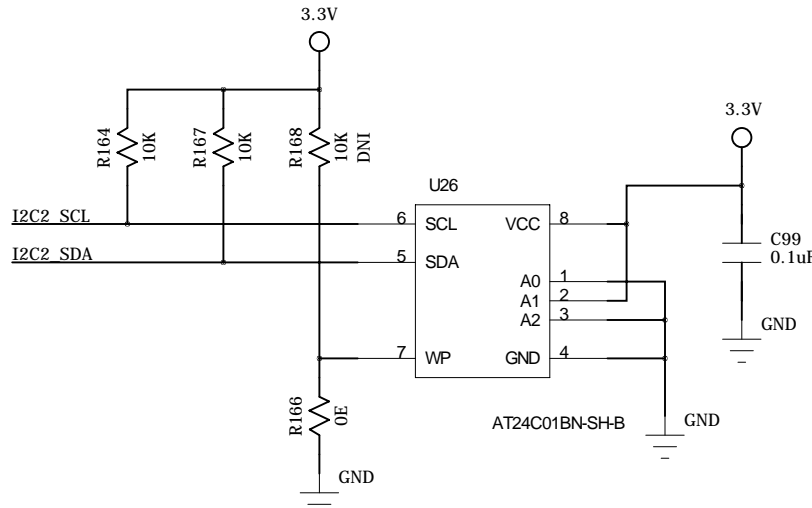
BOOT EEPROM I2C ADDRESS: 0x50

RTC I2C ADDRES: 0x68

BOARD EEPROM : 1KBIT

IO EXPANDER

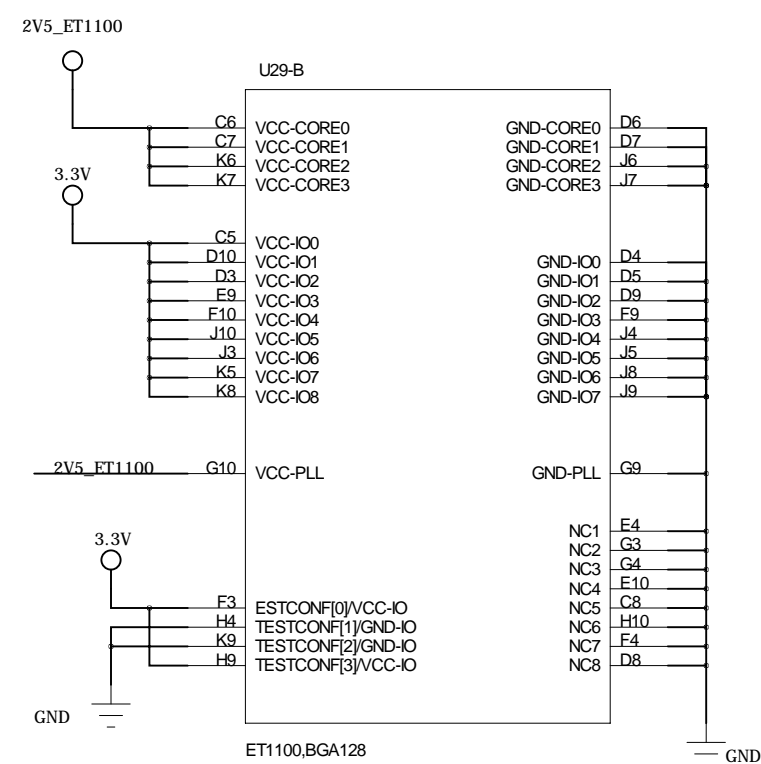
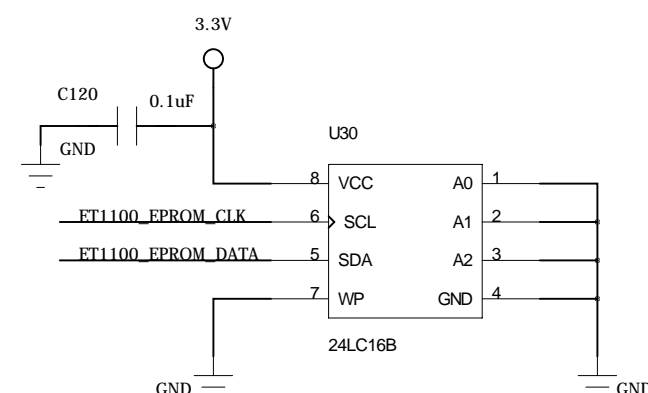
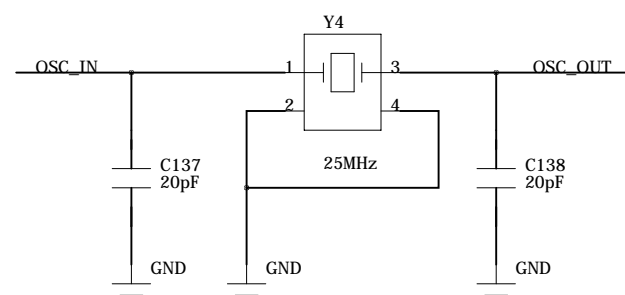
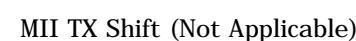
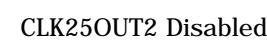
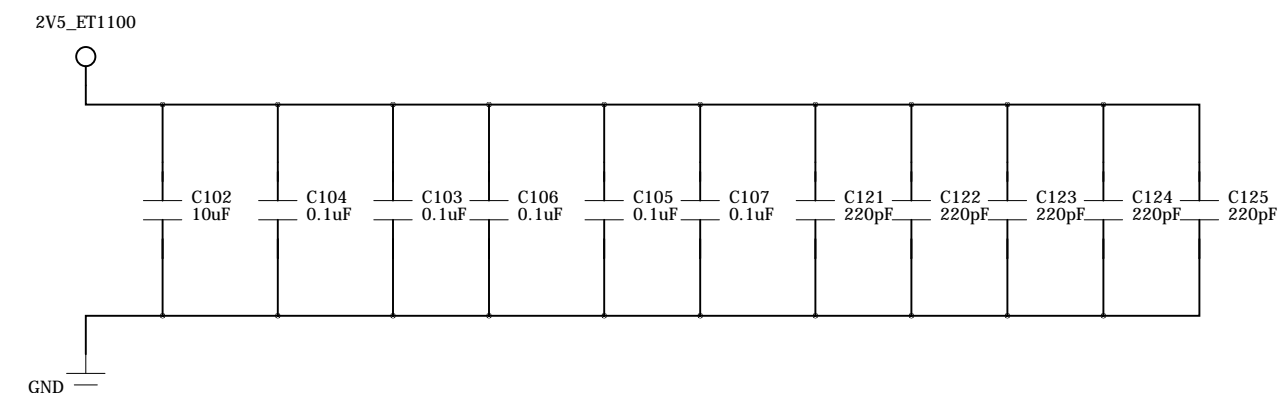
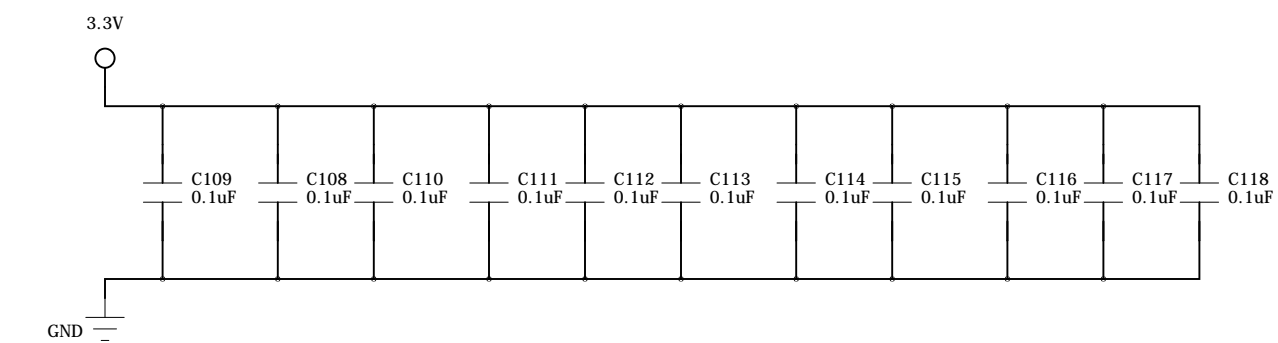
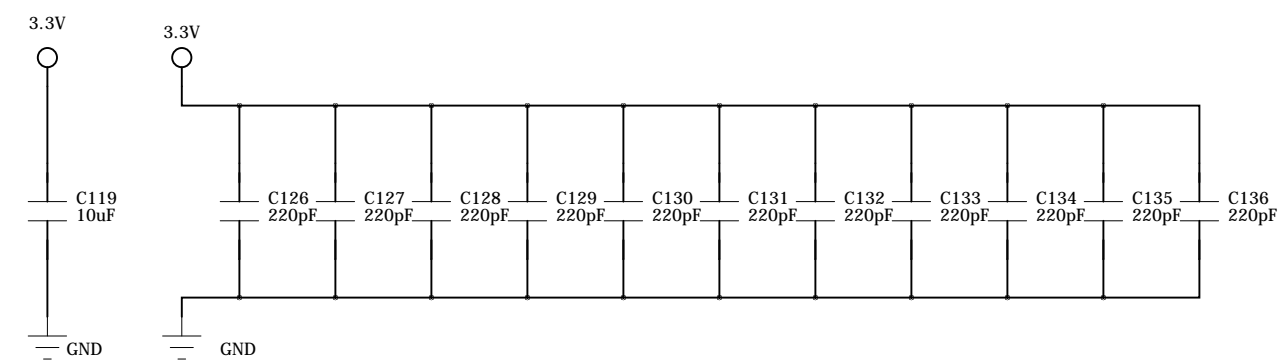
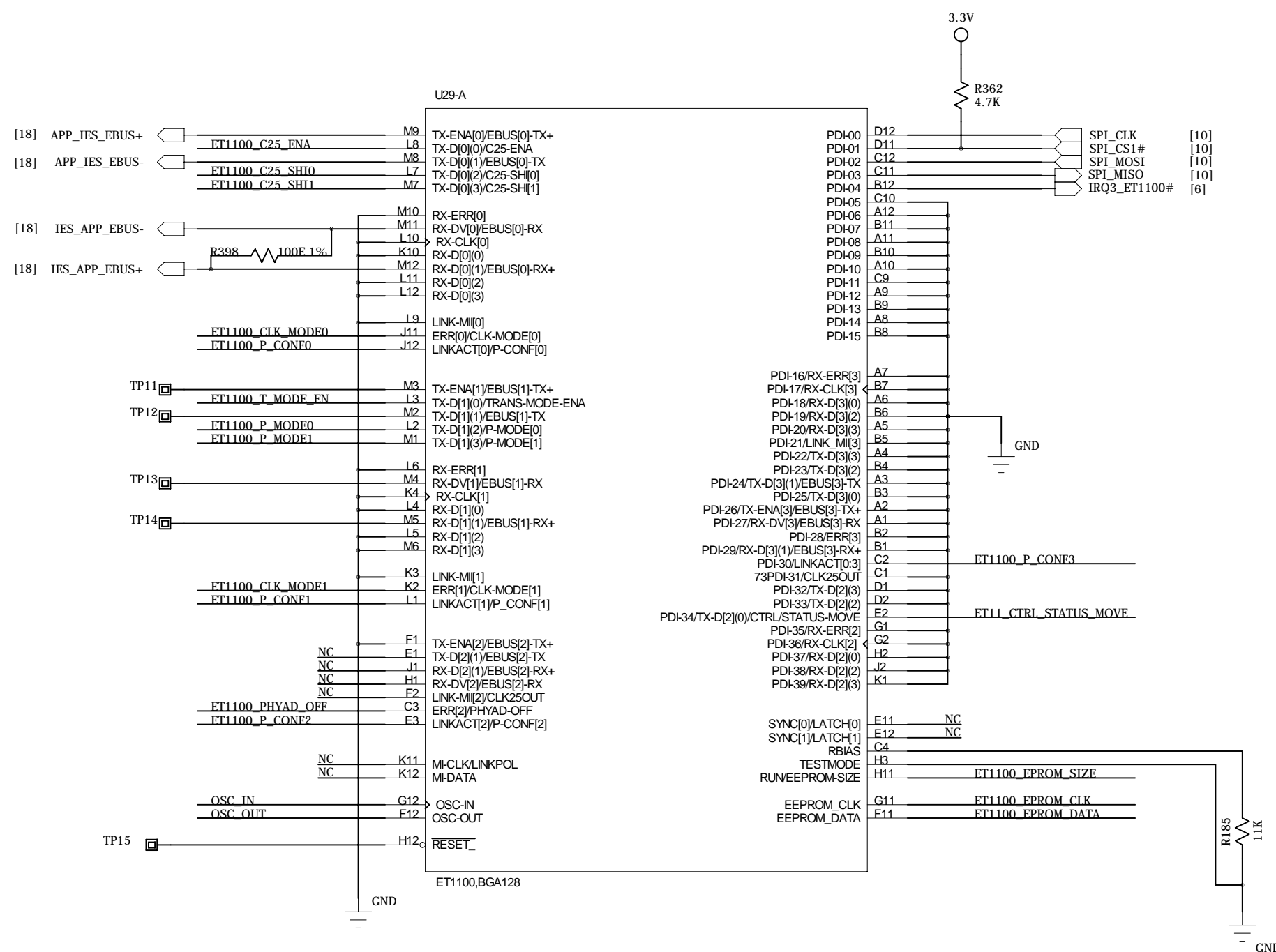
I2C BUS REPEATER



BOARD EEPROM I2C ADDRESS: 0x52

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ENGINEER			SIZE	DWG. NO. 18-600400-001	SHEET 10
			FILE	APP CARD SCHEMATIC	SCALE
					PROD REV. 1.1

ET1100 : IES CARD



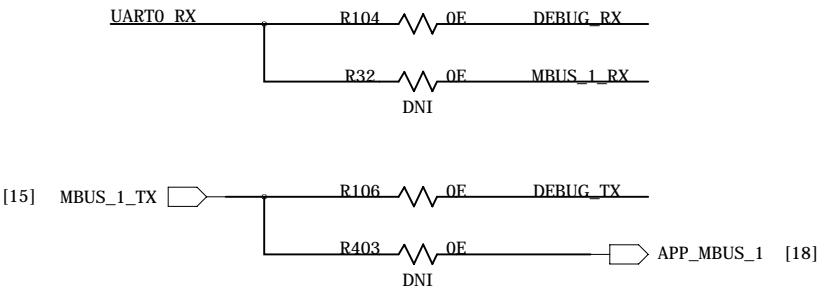
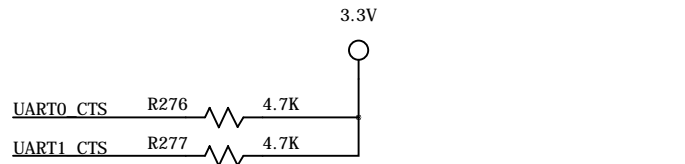
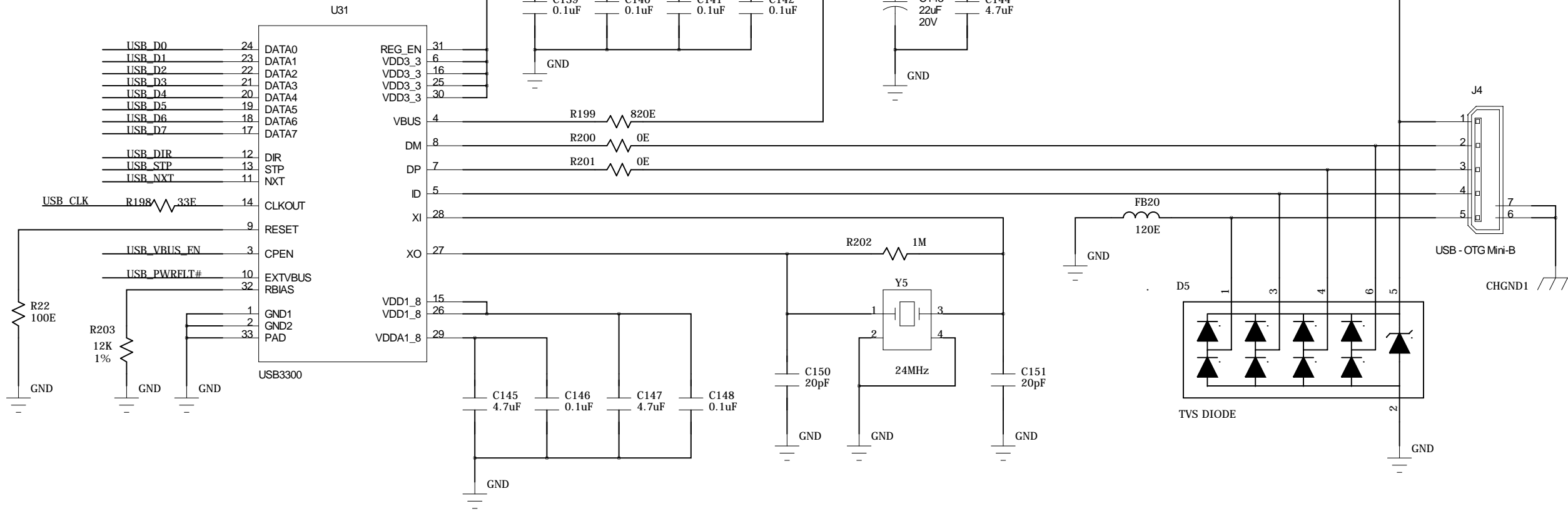
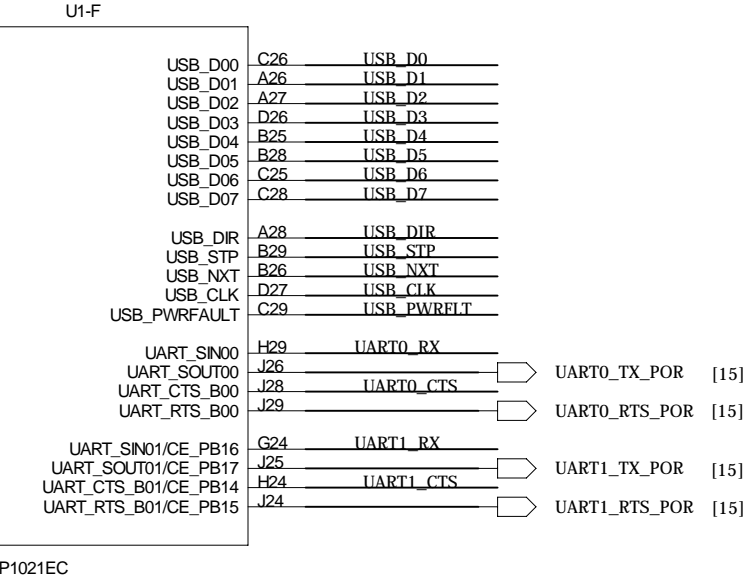
APPROVALS		DATE		COMPRESSOR CONTROLS CORPORATION			
DRAWN AKHILESH JAISWAL		20-JULY-2011		4725 121st Street - Des Moines, Iowa 50323			
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				FILE	APP CARD SCHEMATIC	SCALE	

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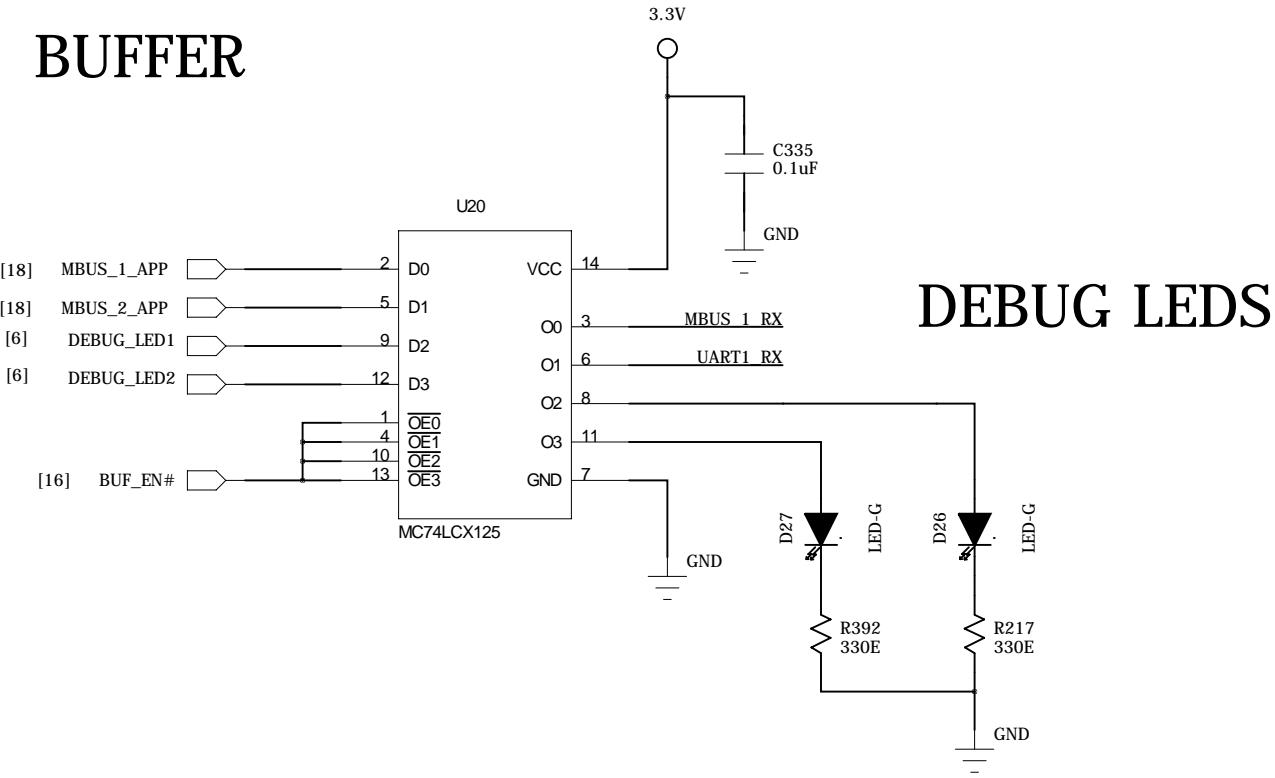
DWG. NO. SH REV.

P1021_USB_SERIAL

USB PHY

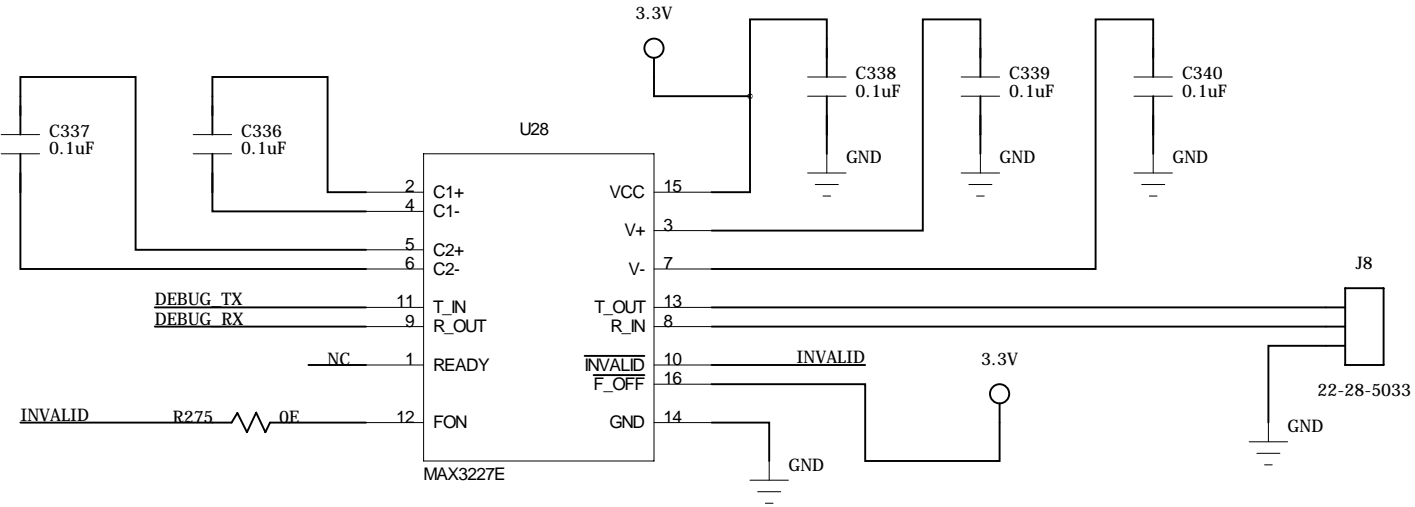


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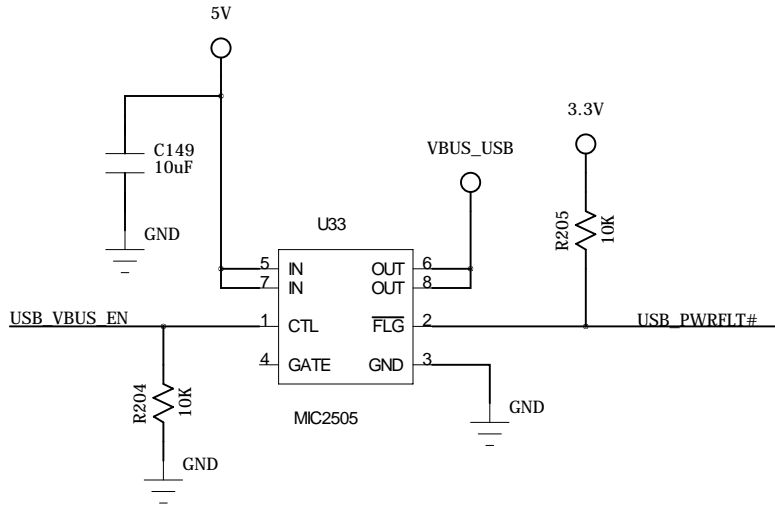


DEBUG LEDS

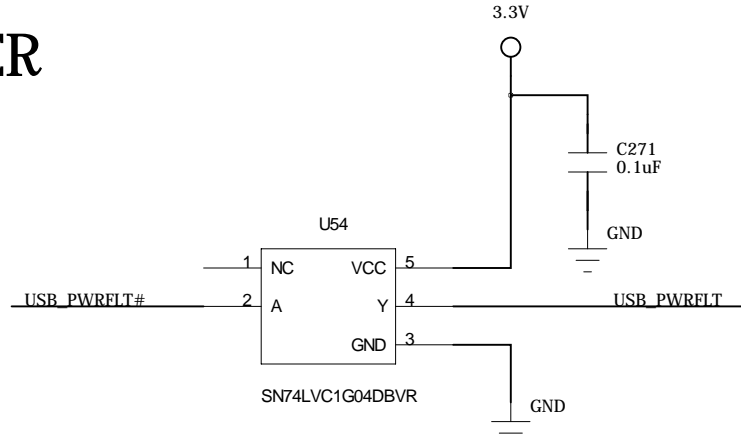
DEBUG SERIAL PORT



POWER SWITCH



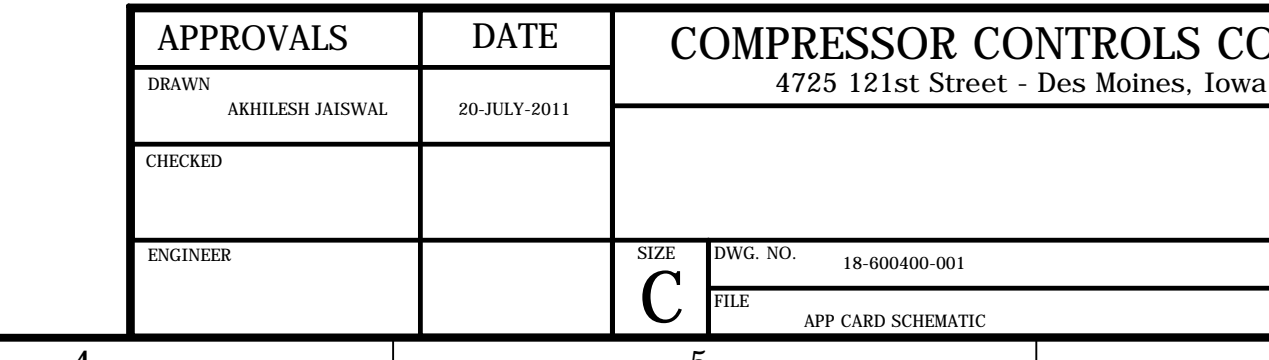
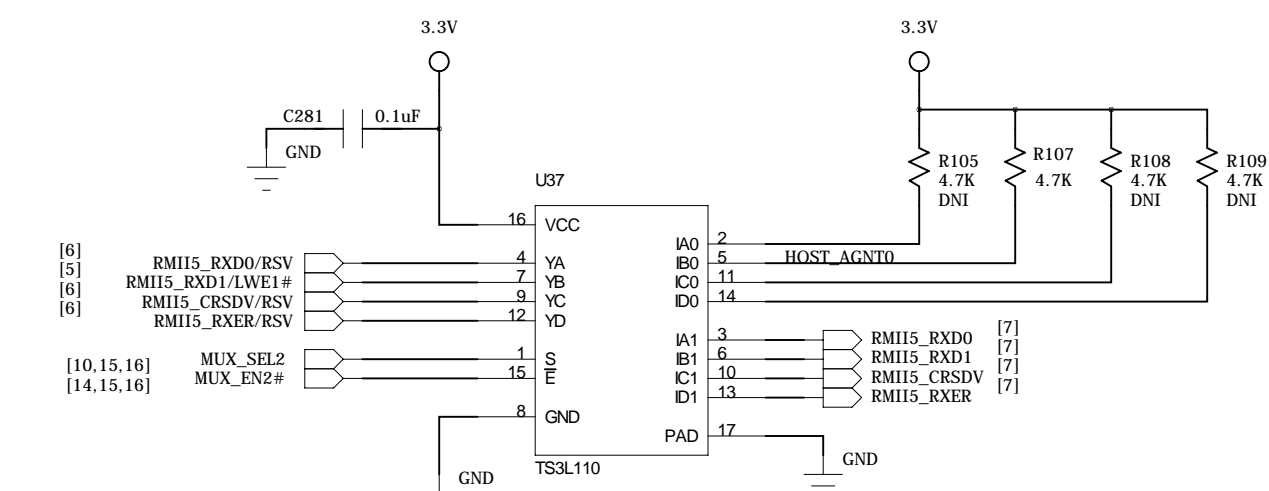
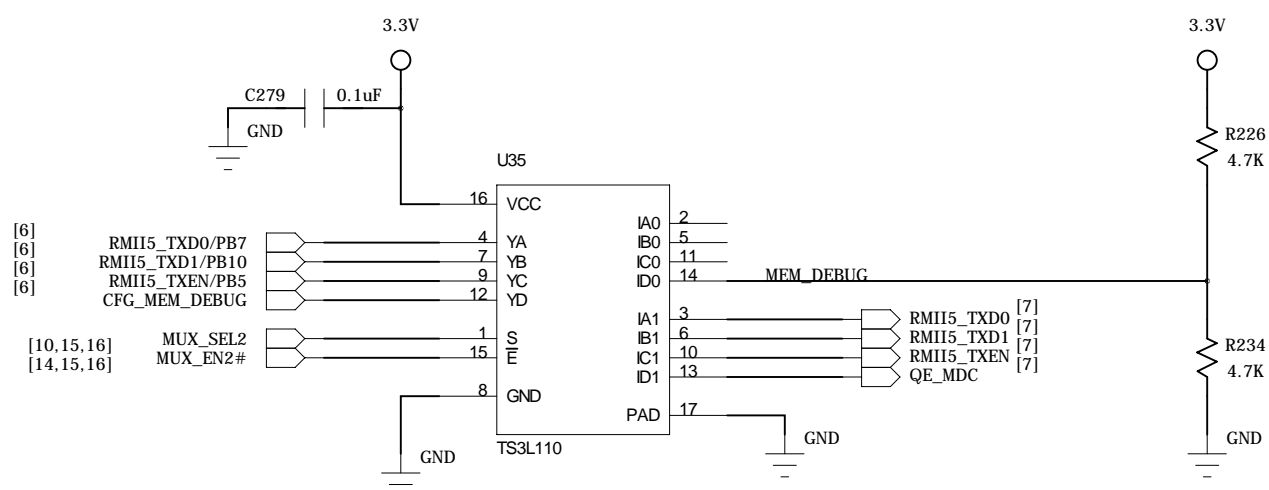
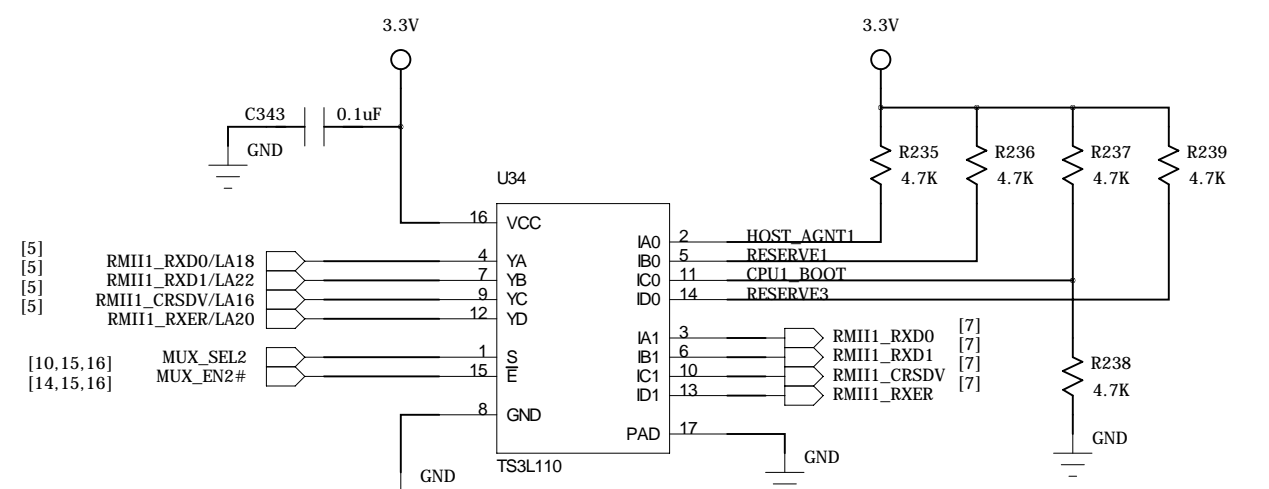
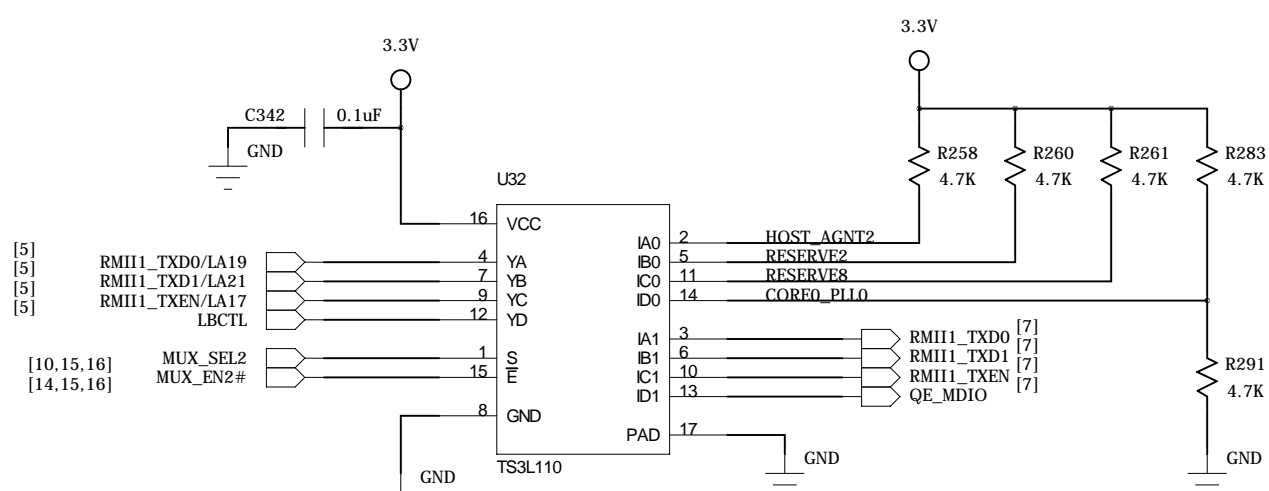
INVERTER



APPROVALS		DATE	COMPRESSOR CONTROLS CORPORATION			
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CHECKED						
ENGINEER			SIZE	DWG. NO. 18-600400-001	SHEET 12	PROD REV. 1.1
			C	FILE APP CARD SCHEMATIC	SCALE	

APPROVALS		DATE		COMPRESSOR CONTROLS CORPORATION 4725 121st Street - Des Moines, Iowa 50323			
DRAWN AKHILESH JAISWAL		20-JULY-2011					
CHECKED							
ENGINEER				SIZE C	DWG. NO. 18-600400-001 FILE APP CARD SCHEMATIC	SHEET 13 SCALE	PROD REV. 1.1

APPROVALS		DATE		<div>COMPRESSOR CONTROLS CORPORATION</div> <div>4725 121st Street - Des Moines, Iowa 50323</div>			
DRAWN AKHILESH JAISWAL		20-JULY-2011					
CHECKED							
ENGINEER				<div>SIZE</div> <div>C</div>	<div>DWG. NO.</div> <div>18-600400-001</div>	<div>SHEET</div> <div>14</div>	<div>PROD REV.</div> <div>1.1</div>
				<div>FILE</div> <div>APP CARD SCHEMATIC</div>	<div>SCALE</div>		

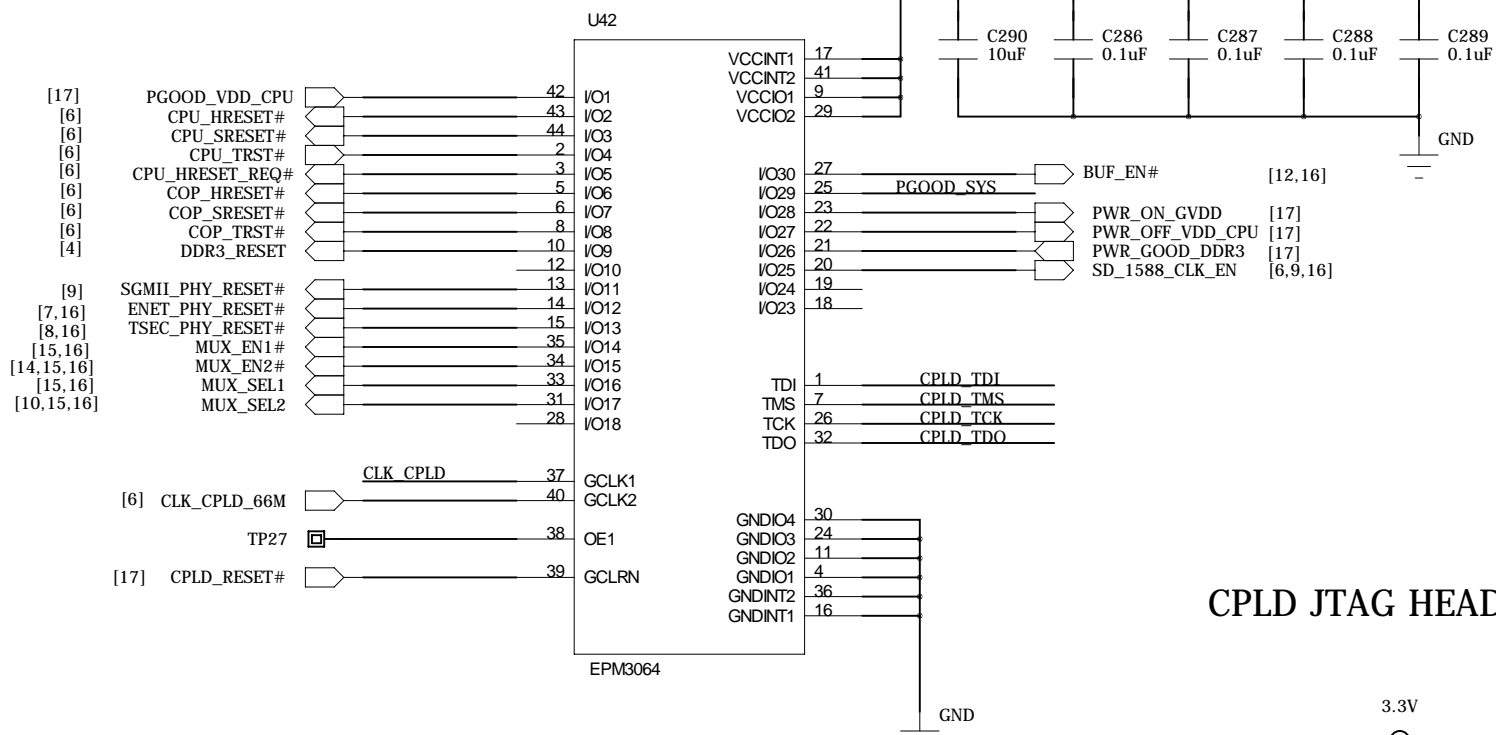


APPROVALS		DATE		COMPRESSOR CONTROLS CORPORATION 4725 121st Street - Des Moines, Iowa 50323			
DRAWN AKHILESH JAISWAL		20-JULY-2011					
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ENGINEER				SIZE C	DWG. NO. 18-600400-001	SHEET 15	PROD REV. 1.1
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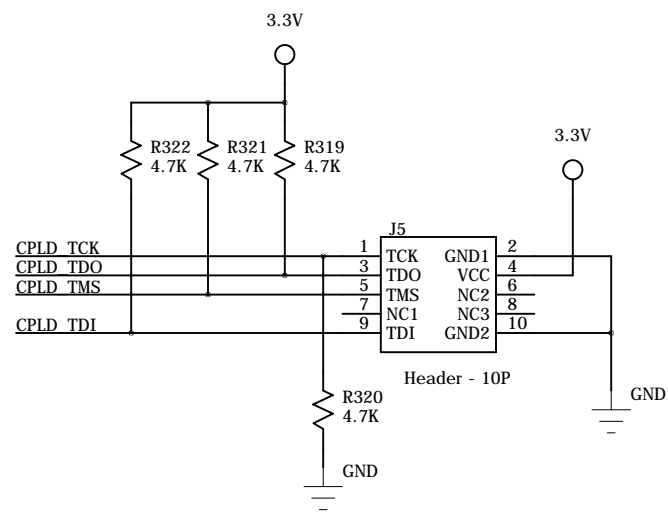
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DWG. NO. SH REV.

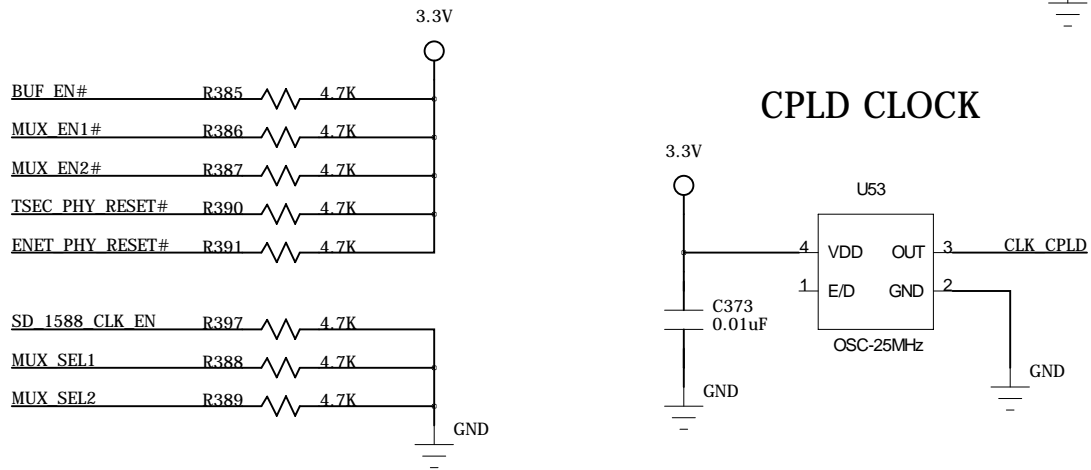
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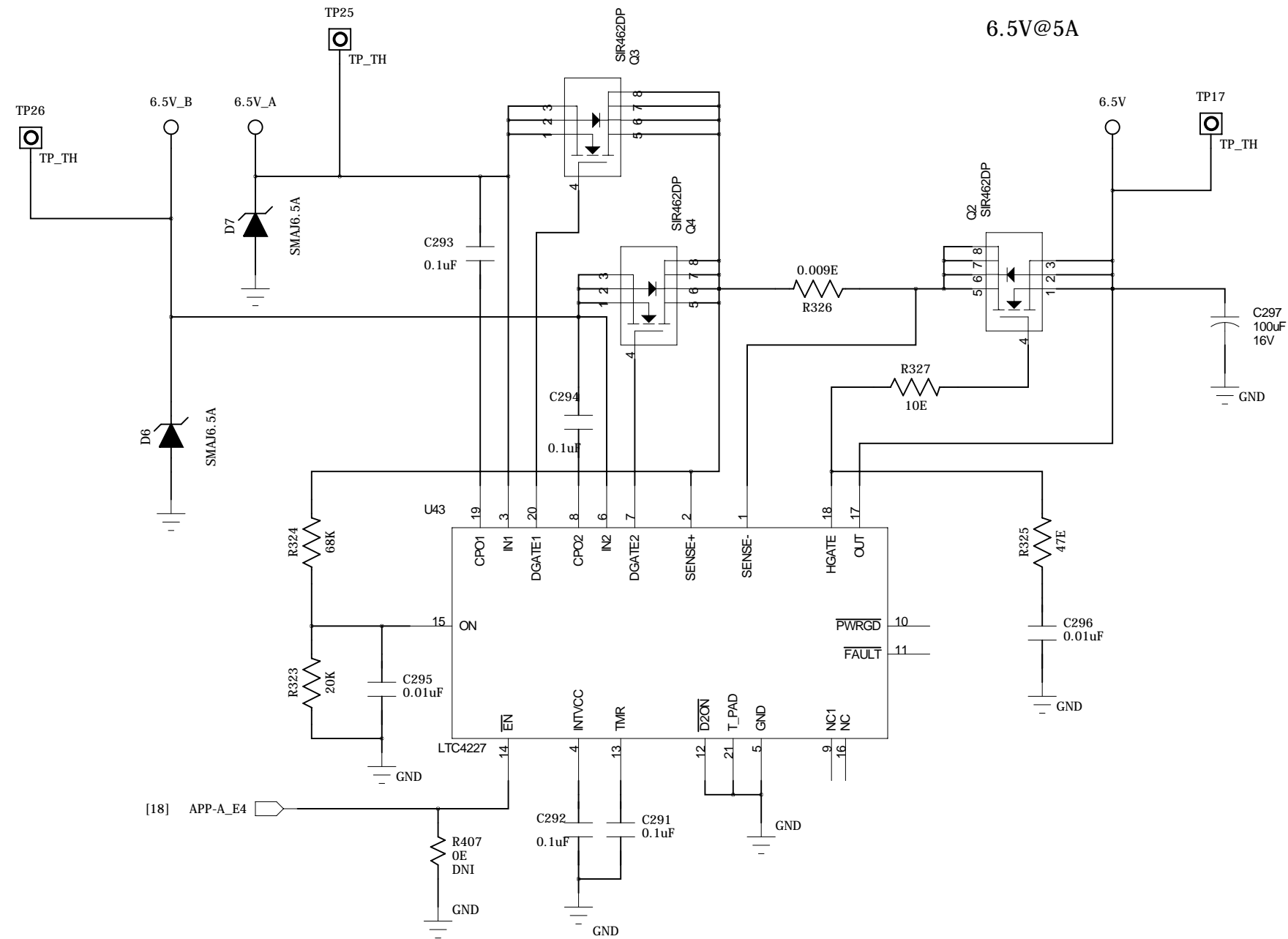
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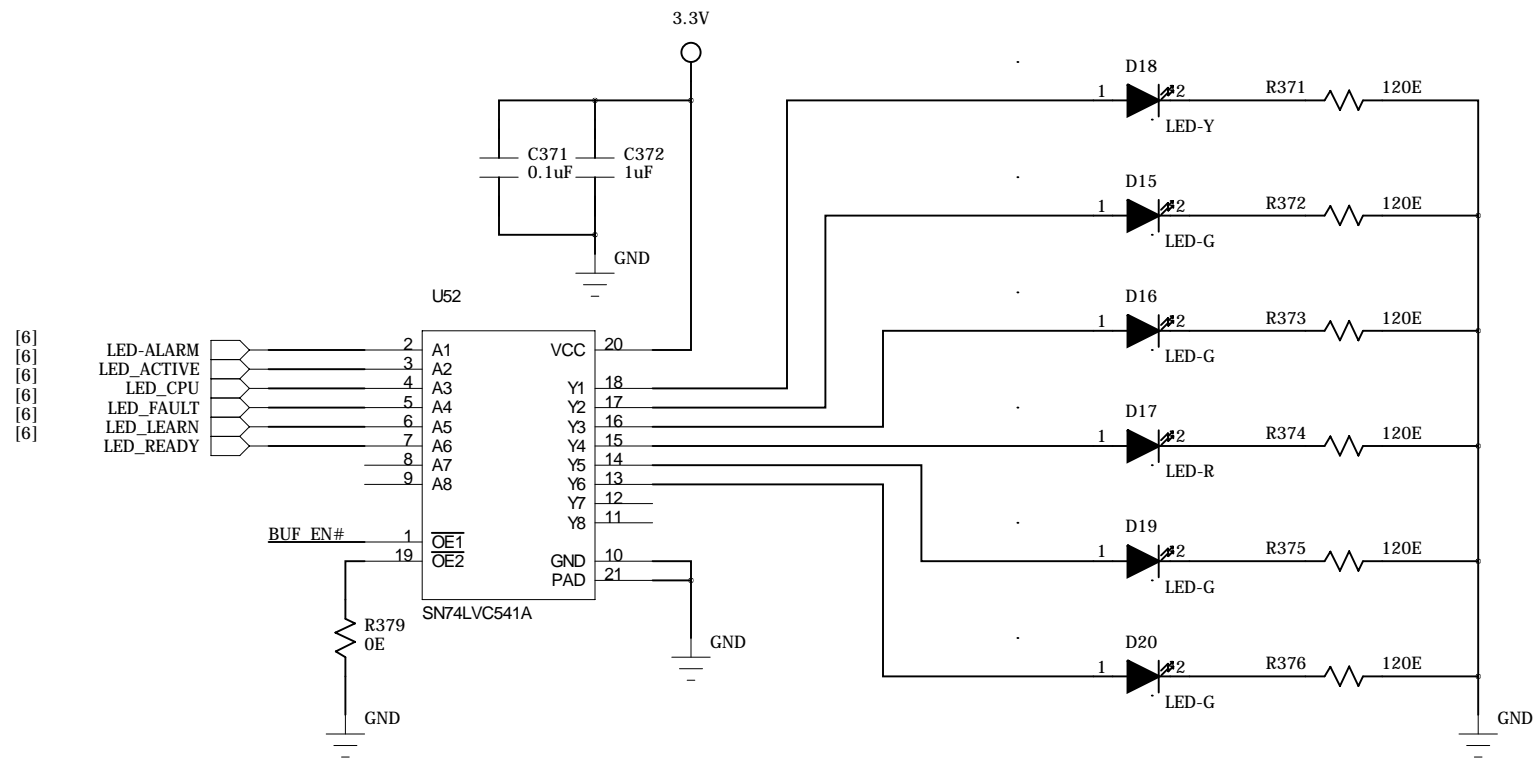
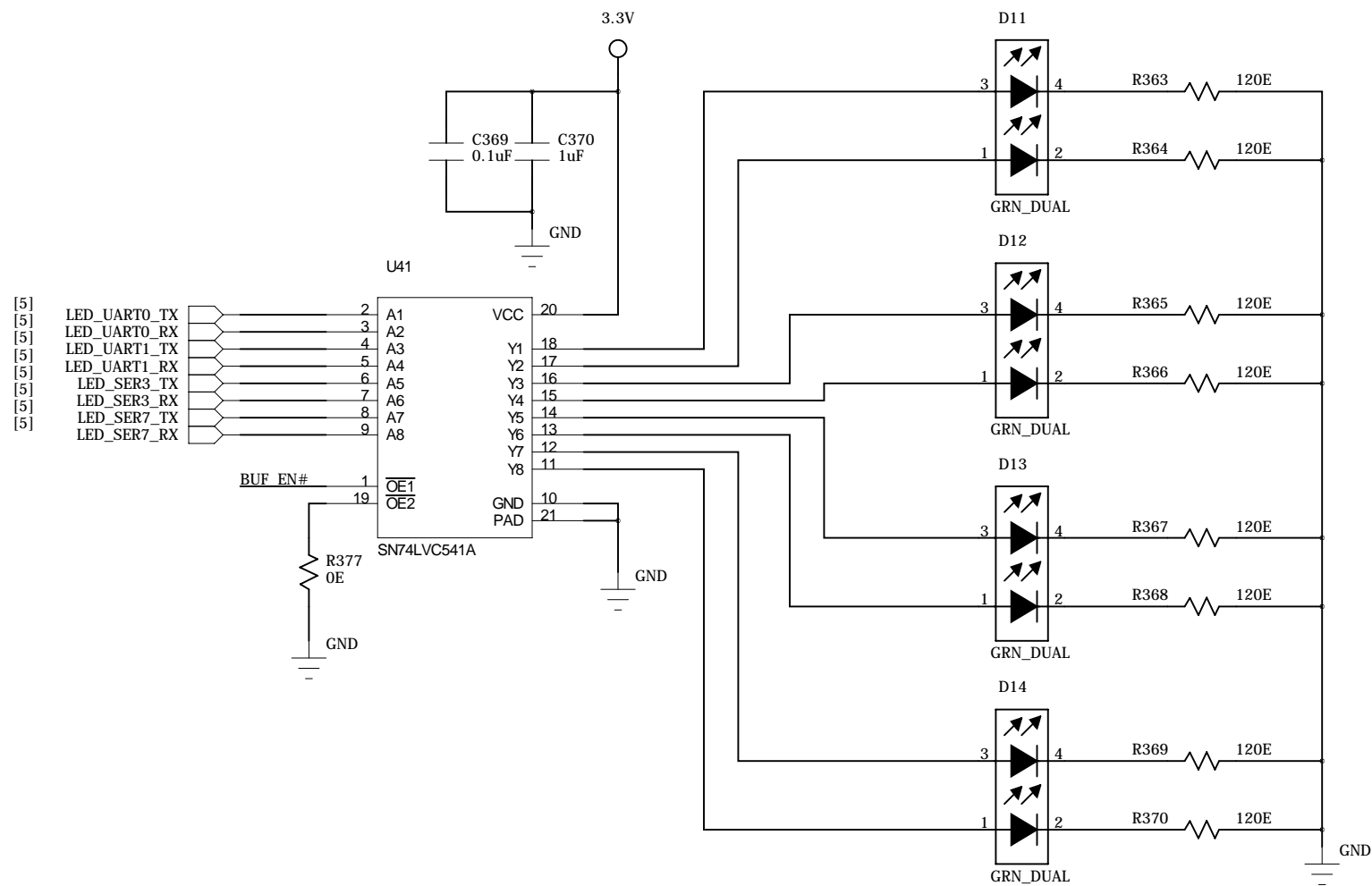
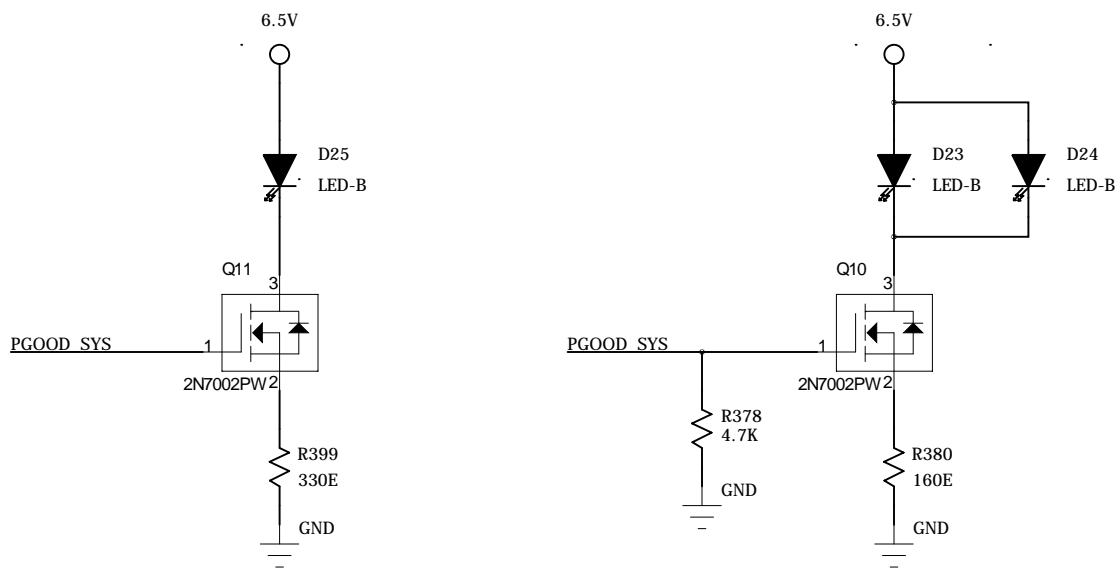
CPLD CLOCK



HOT SWAP

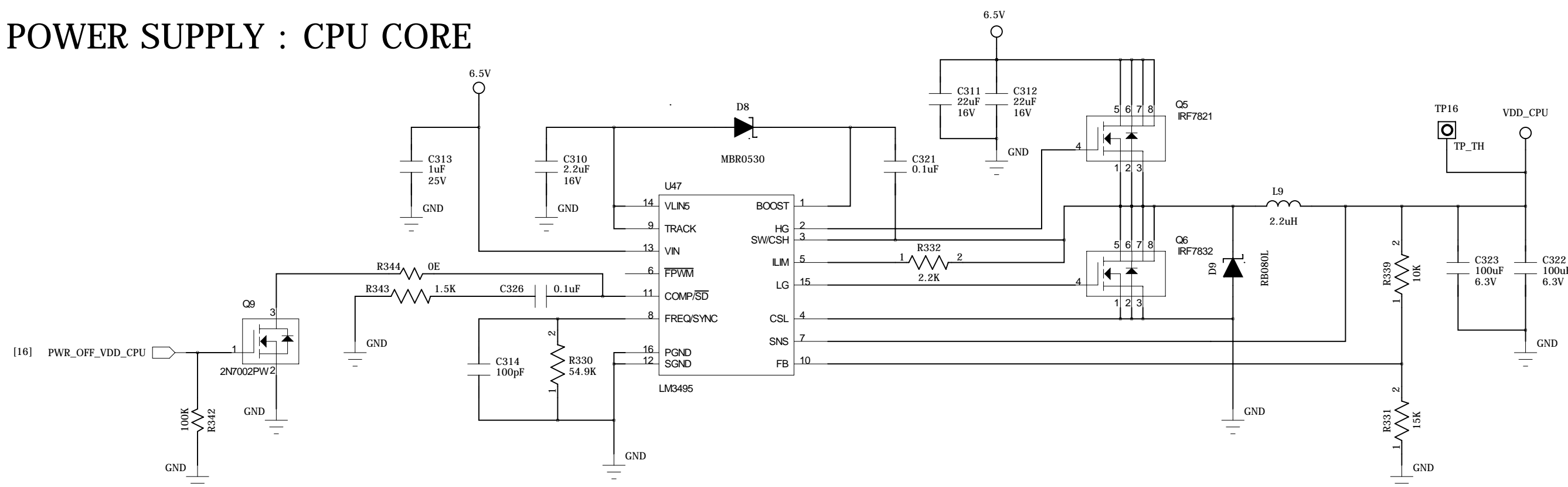


FRONT PANEL LEDS

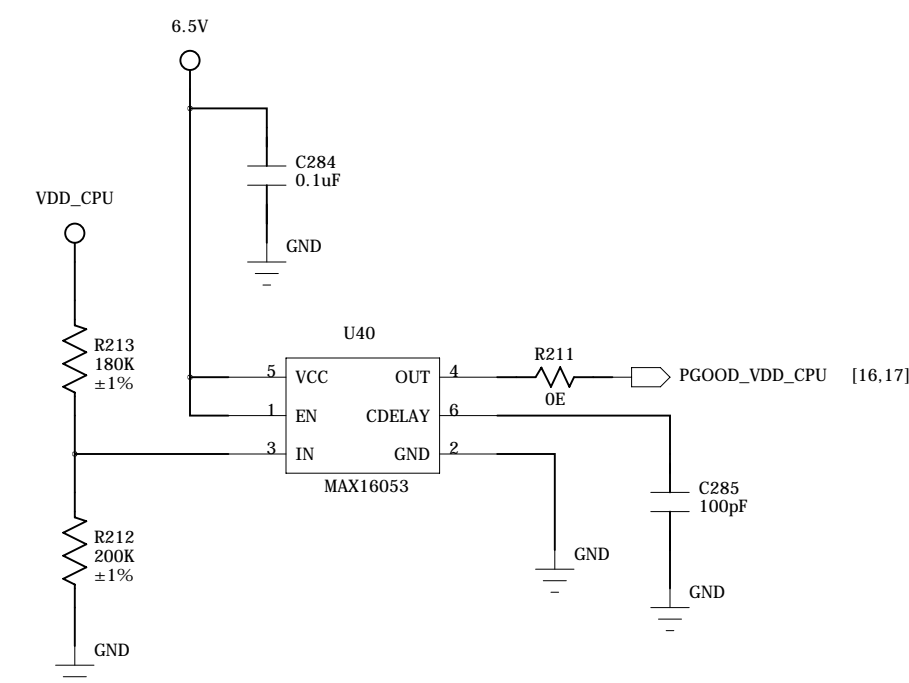


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DRAWN		20-JULY-2011	4725 121st Street - Des Moines, Iowa 50323			
AKHILESH JAISWAL						
CHECKED						
ENGINEER			SIZE	DWG. NO.	SHEET	PROD REV.
			C	18-600400-001	16	1.1
				FILE	SCALE	
				APP CARD SCHEMATIC		

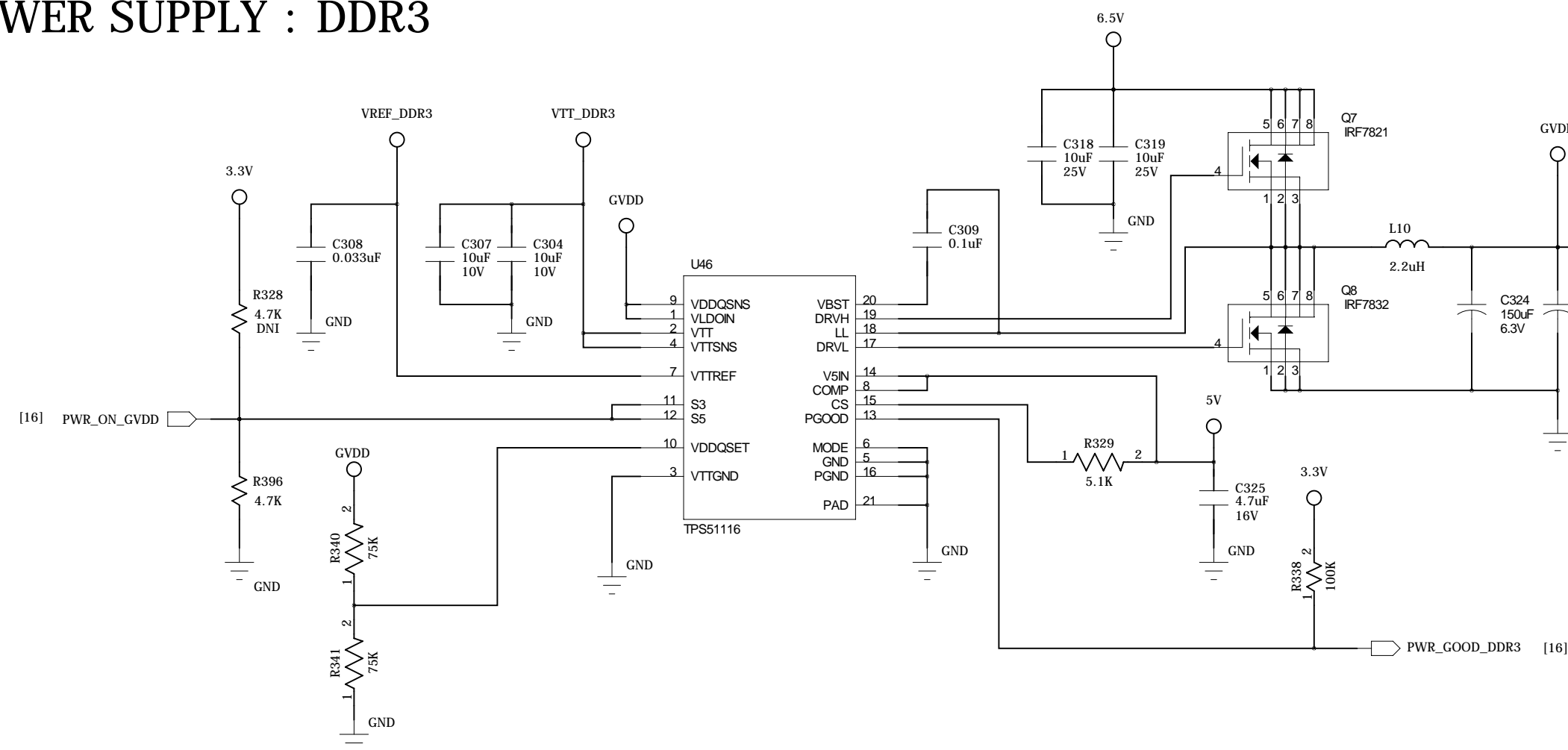
POWER SUPPLY : CPU CORE



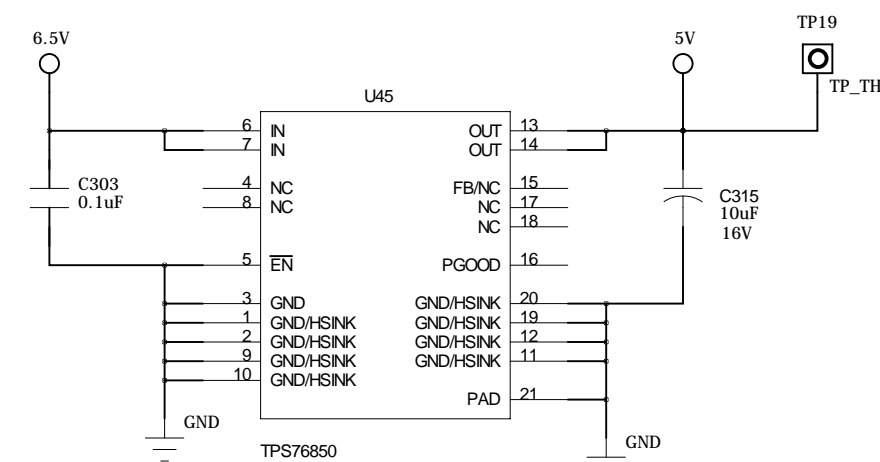
VDD_CPU MONITOR



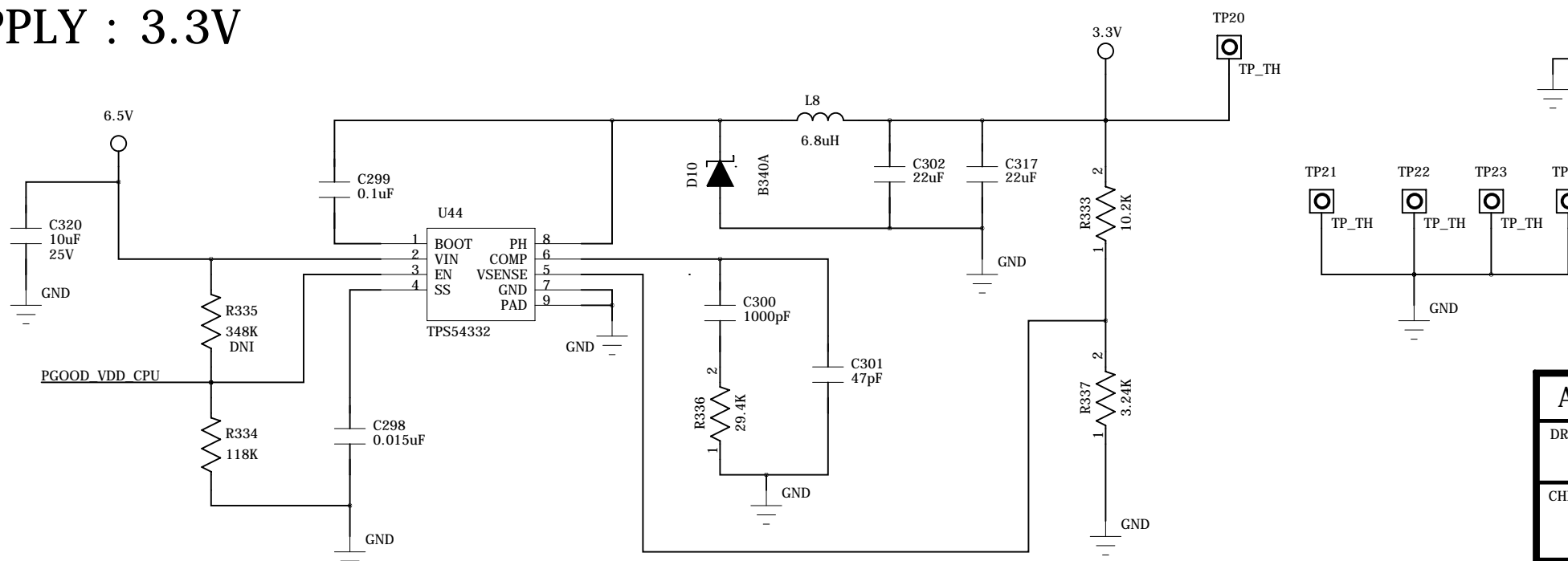
POWER SUPPLY : DDR3



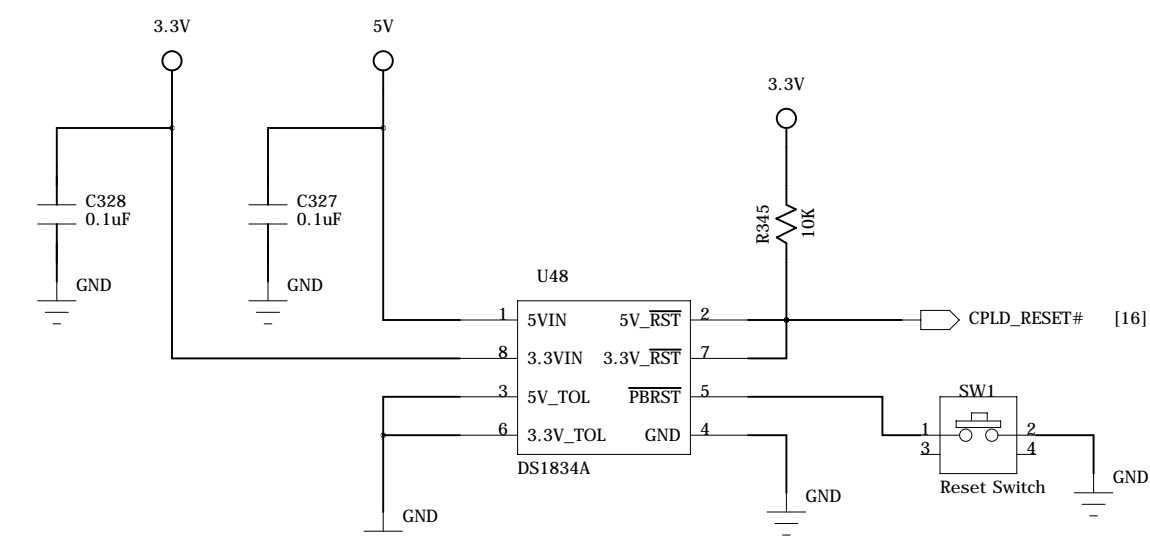
POWER SUPPLY : 5V



POWER SUPPLY : 3.3V



3.3V AND 5V MONITOR_RESET CONTROL



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ENGINEER							
C	SIZE	DWG. NO. 18-600400-001			SHEET 17		PROD REV.
	FILE	APP CARD SCHEMATIC			SCALE		1.1

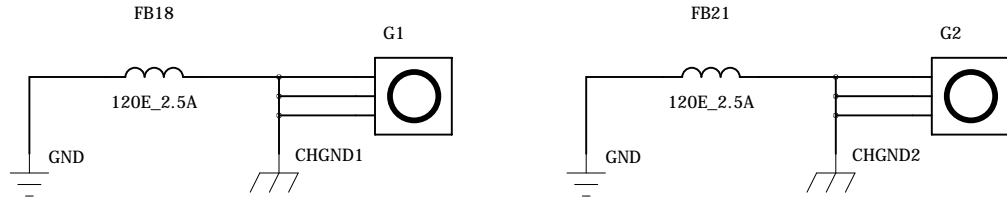
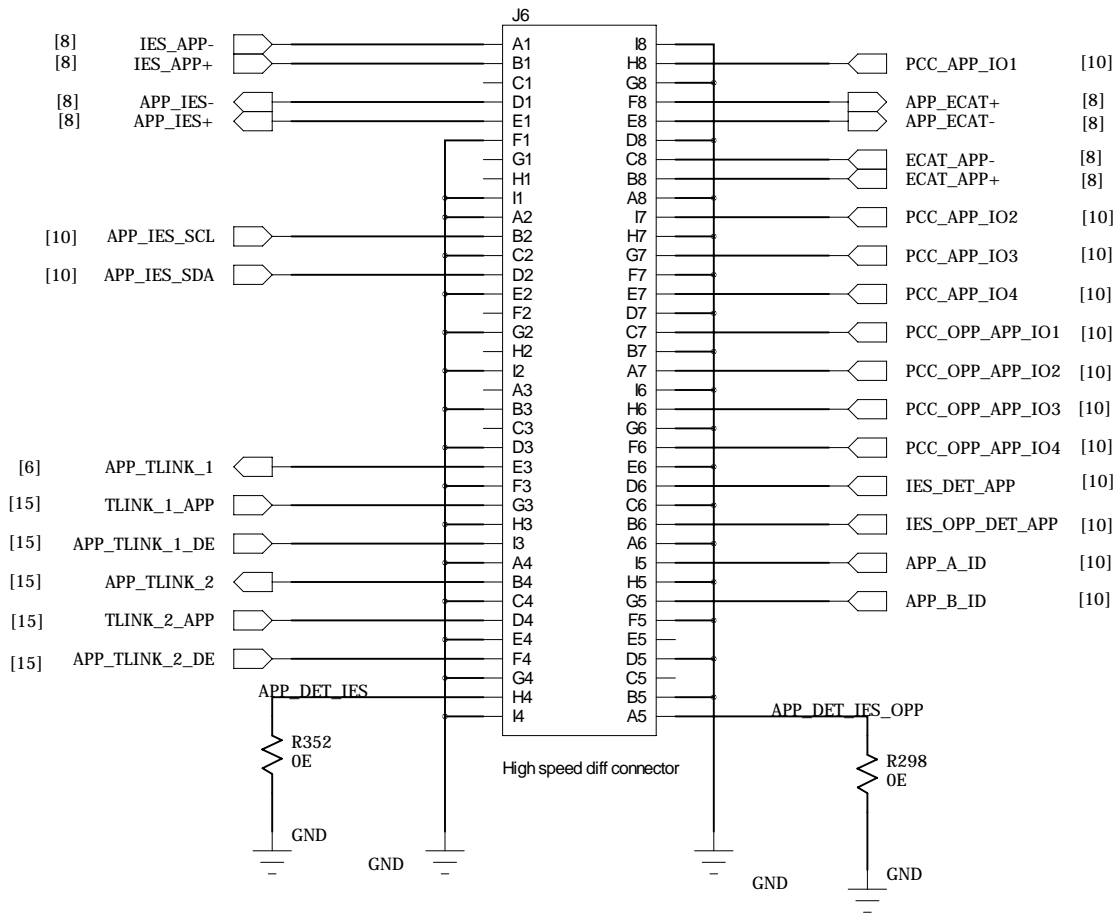
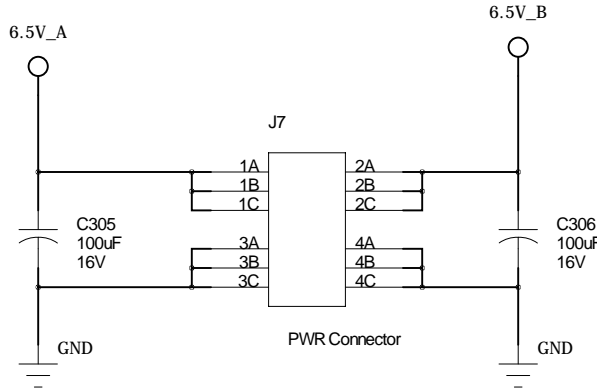
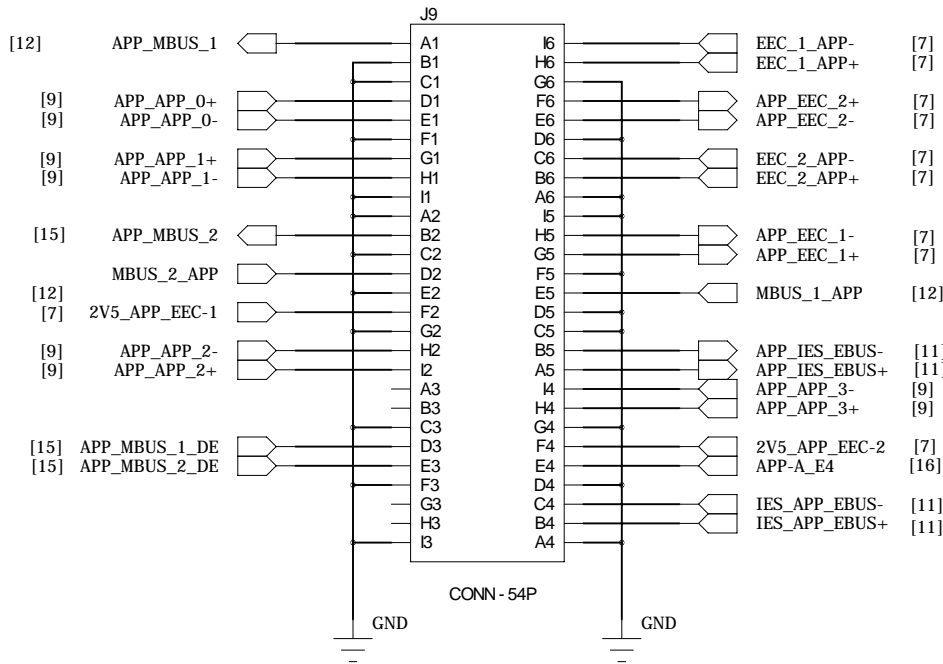
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DWG. NO.

SH

REV.

BACKPLANE CONNECTOR



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CHECKED						
ENGINEER			SIZE	DWG. NO.	SHEET	PROD REV.
			C	18-600400-001	18	1.1
				FILE	SCALE	
				APP CARD SCHEMATIC		

1		2		3		4		5		6					
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D	C	B	A									A	B	C	D
				APPROVALS		DATE		COMPRESSOR CONTROLS CORPORATION							
DRAWN				AKHILESH JAISWAL		20-JULY-2011		4725 121st Street - Des Moines, Iowa 50323							
CHECKED															
ENGINEER															
				SIZE		DWG. NO.		SHEET		PROD					
				C		18-600400-001		19		REV.					
						FILE		SCALE		1.1					
						APP CARD SCHEMATIC									
1		2		3		4		5		6					