Renesas Synergy(tm) PE-HMI1 Product Example

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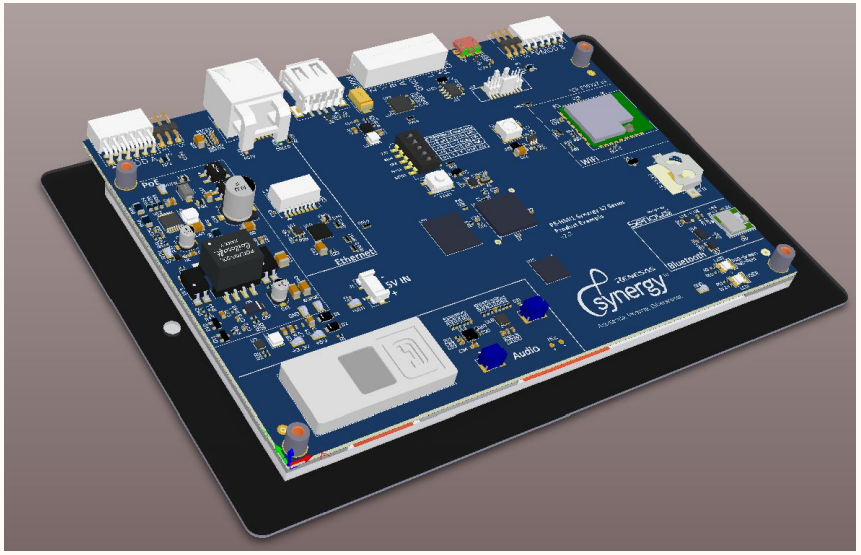

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Renesas Synergy(tm) PE-HMI1 Product Example Index		
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File: PE-HMI1_v2.0-Index.SchDoc		

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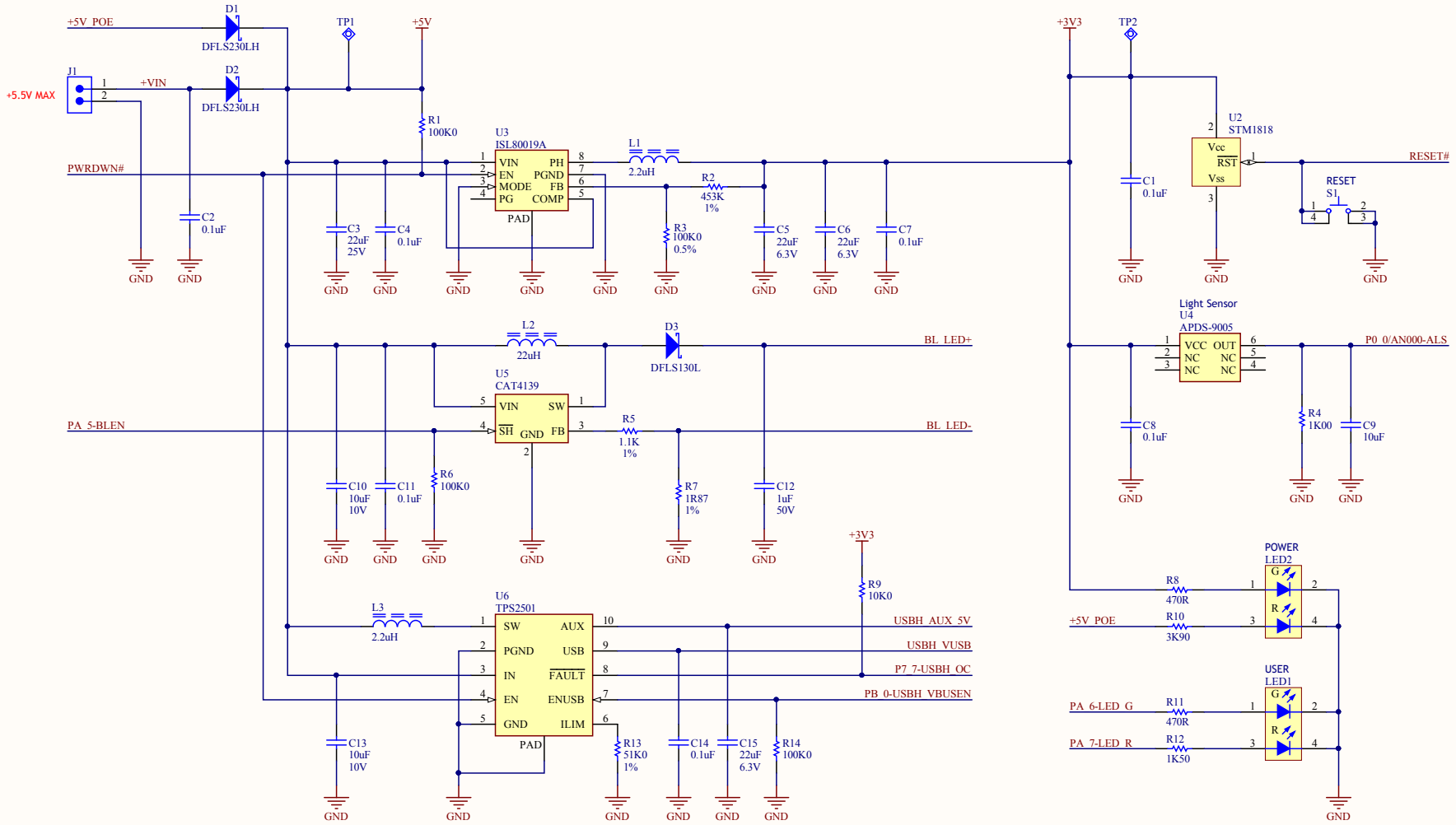

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Renesas Synergy(tm) PE-HMI1 Product Example
Power Supply

Version: v2.0	PCB Revision: PCB 03
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File: PE-HMI1_v2.0-Power.SchDoc	

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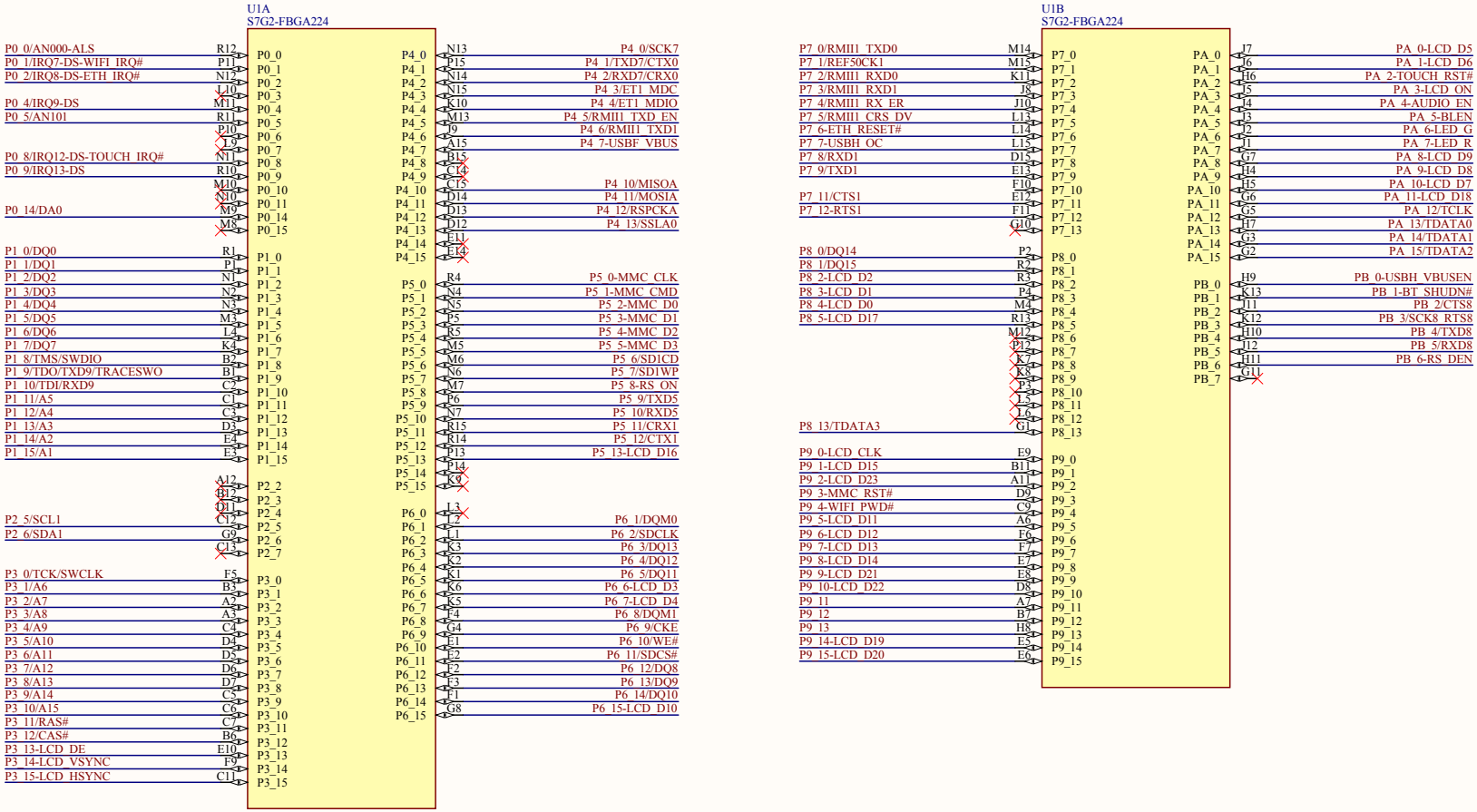

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Renesas Synergy(tm) PE-HMI1 Product Example
MCU Main Signals

Version: v2.0	PCB Revision: PCB 03
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File: PE-HMI1_v2.0-MCU_Signals.SchDoc	

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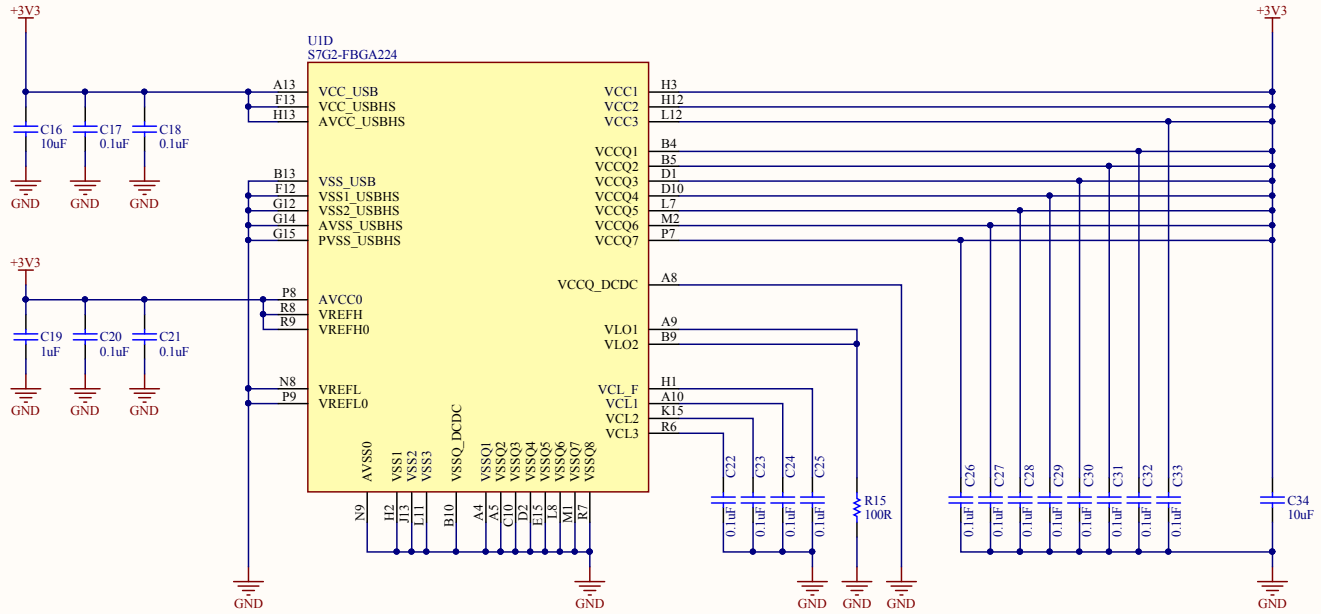

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Renesas Synergy(tm) PE-HMI1 Product Example	
MCU Power Supply	
Version: v2.0	PCB Revision: PCB 03
Release Date: 7/7/2015	Sheet 4 of 12
File: PE-HMI1_v2.0-MCU_Power.SchDoc	

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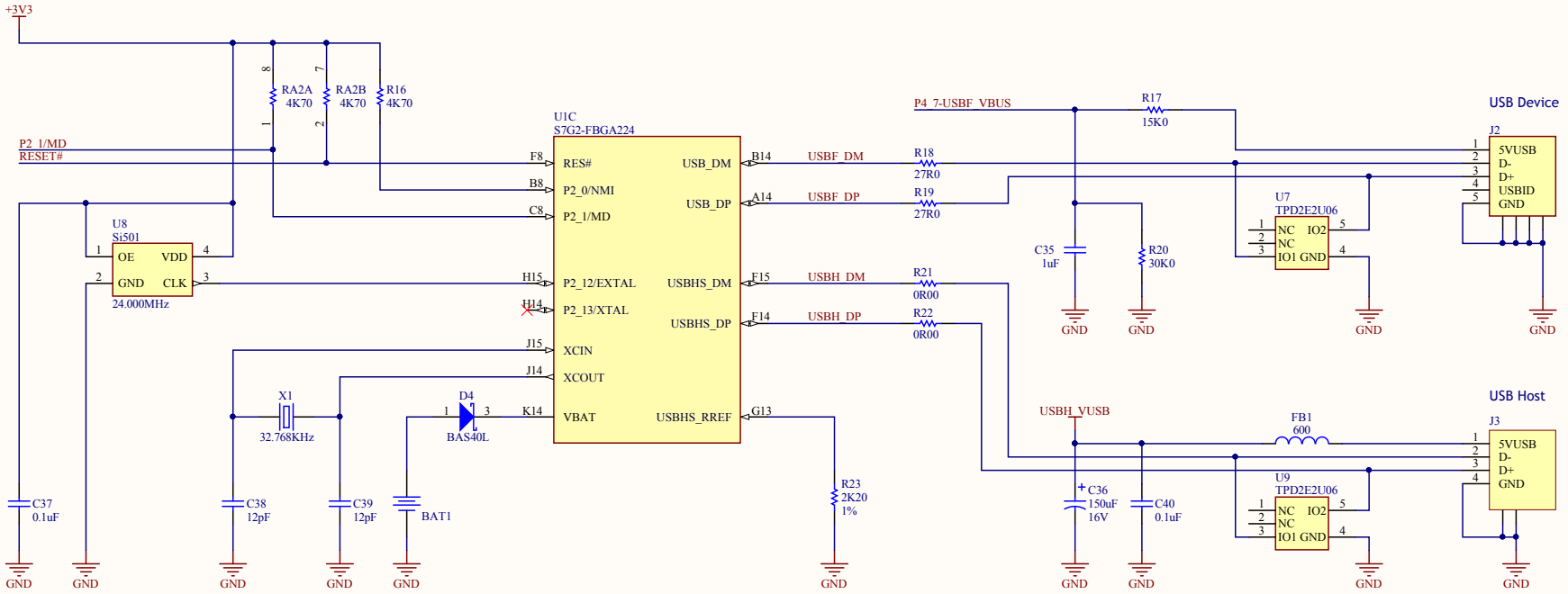

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Renesas Synergy(tm) PE-HMI1 Product Example
MCU Clocks, Mode, USB

Version: v2.0	PCB Revision: PCB 03
Release Date: 7/7/2015	Sheet 5 of 12
File: PE-HMI1_v2.0-MCU_Clock_USB.SchDoc	

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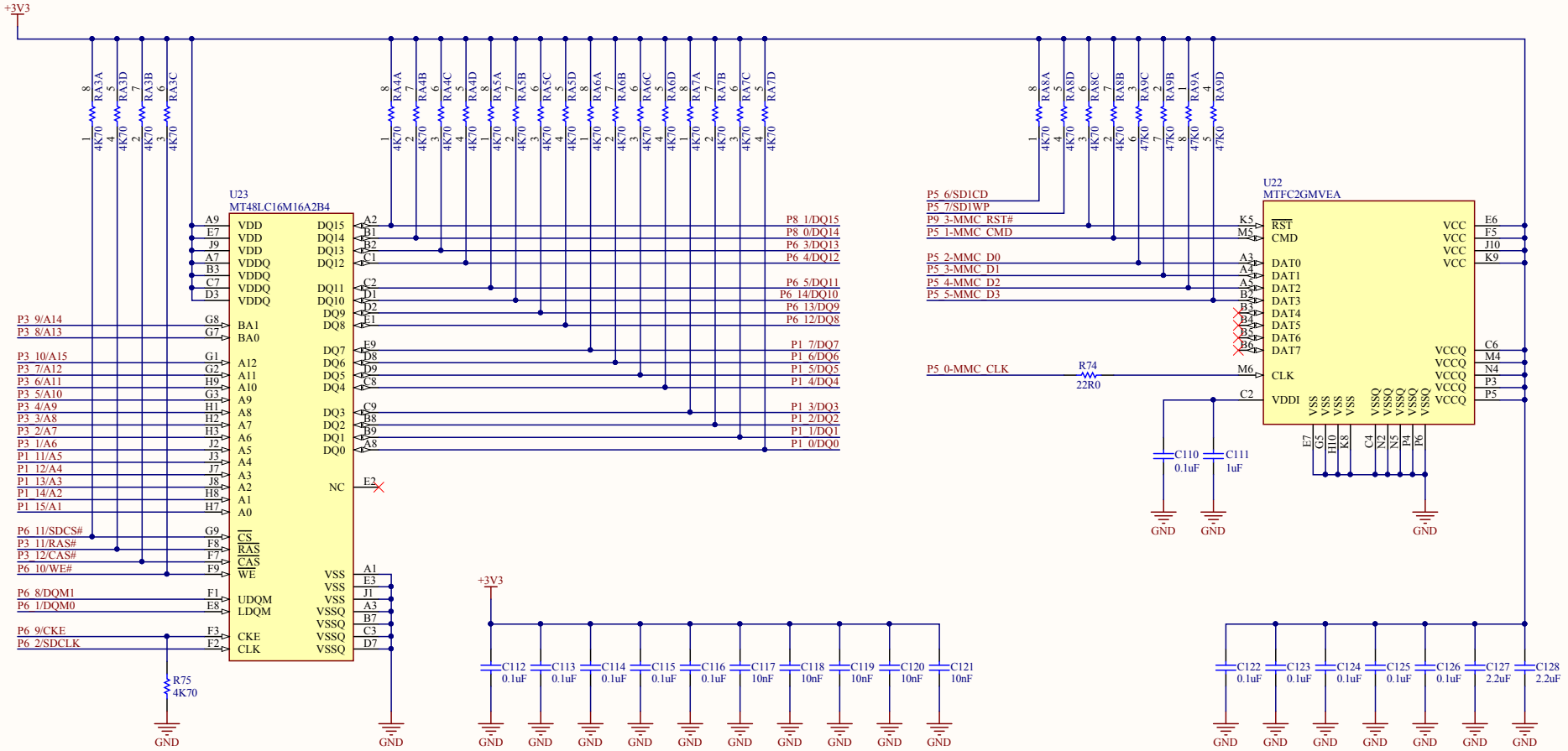

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Renesas Synergy(tm) PE-HMI1 Product Example
DRAM, eMMC memories

Version: v2.0	PCB Revision: PCB 03
Release Date: 7/7/2015	Sheet 6 of 12
File: PE-HMI1_v2.0-SDRAM.SchDoc	

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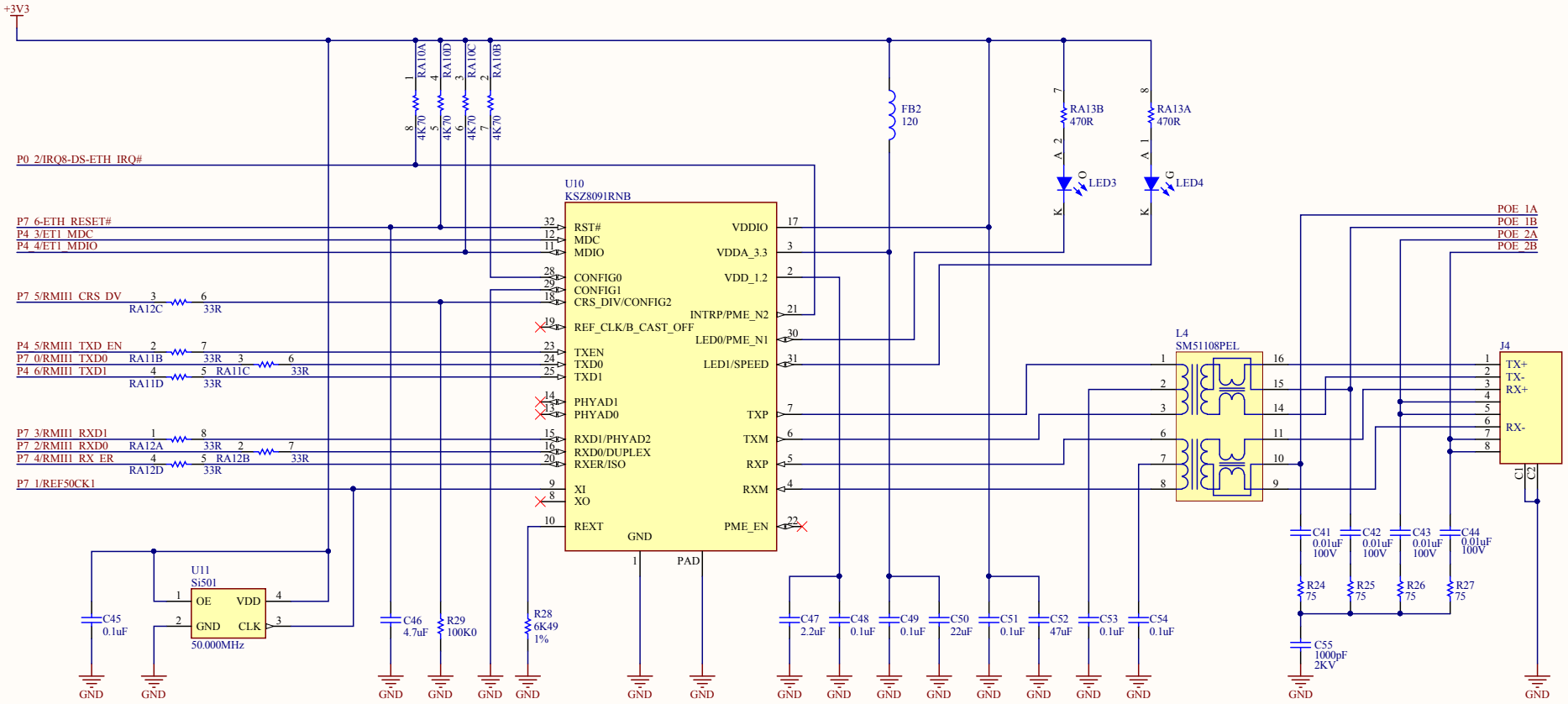

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Renesas Synergy(tm) PE-HMI1 Product Example
Ethernet IEEE802.3 10/100BaseTX + IEEE1588 PTP

Version: v2.0	PCB Revision: PCB 03
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File: PE-HMI1_v2.0-Ethernet.SchDoc	

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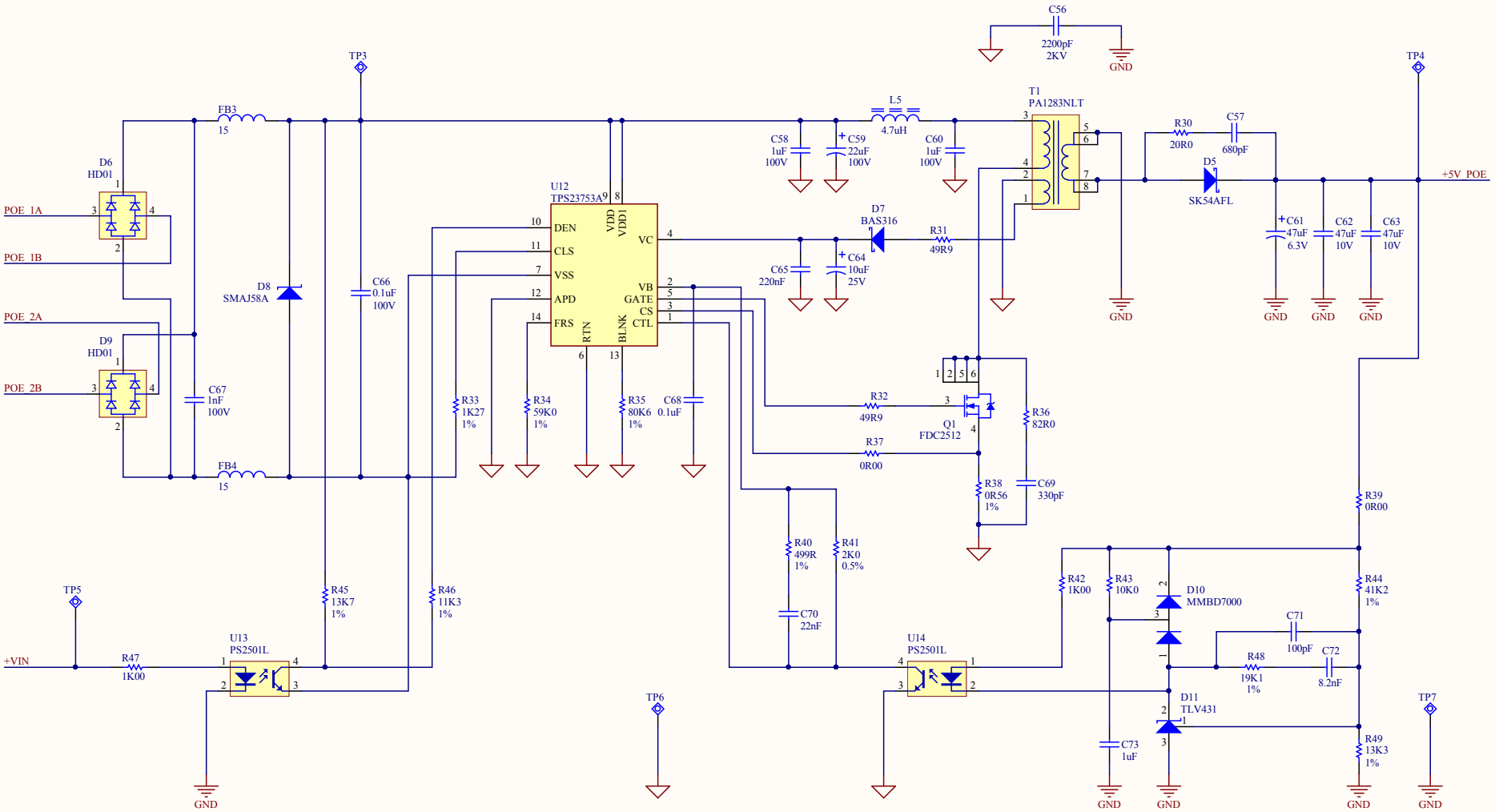
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2KV
GND
TP3
TP4
FB3
15
L5
4.7uH
T1
PA1283NLT
C58
1uF
100V
C59
22uF
100V
C60
1uF
100V
R30
20R0
C57
680pF
D5
SK54AFL
+5V_POE
D6
HD01
POE_1A
POE_1B
D8
SMAJ58A
C66
0.1uF
100V
U12
TPS23753A
DEN
CLS
VSS
APD
FRS
RTN
VDD
VDD1
VC
VB
GATE
CS
CTL
BLNK
D7
BAS316
R31
49R9
C65
220nF
C64
10uF
25V
C61
47uF
6.3V
C62
47uF
10V
C63
47uF
10V
POE_2A
D9
HD01
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C67
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100V
R33
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1%
R34
59K0
1%
R35
80K6
1%
C68
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R32
49R9
Q1
FDC2512
R36
82R0
R37
0R00
R38
0R56
1%
C69
330pF
FB4
15
R40
499R
1%
R41
2K0
0.5%
C70
22nF
R39
0R00
TP5
+VIN
R47
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U13
PS2501L
R45
13K7
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R46
11K3
1%
TP6
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R42
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R43
10K0
D10
MMBD7000
C71
100pF
R44
41K2
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R48
19K1
1%
C72
8.2nF
D11
TLV431
C73
1uF
R49
13K3
1%
TP7
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Renesas Synergy(tm) PE-HMI1 Product Example
Ethernet PoE IEE802.3at
Version: v2.0
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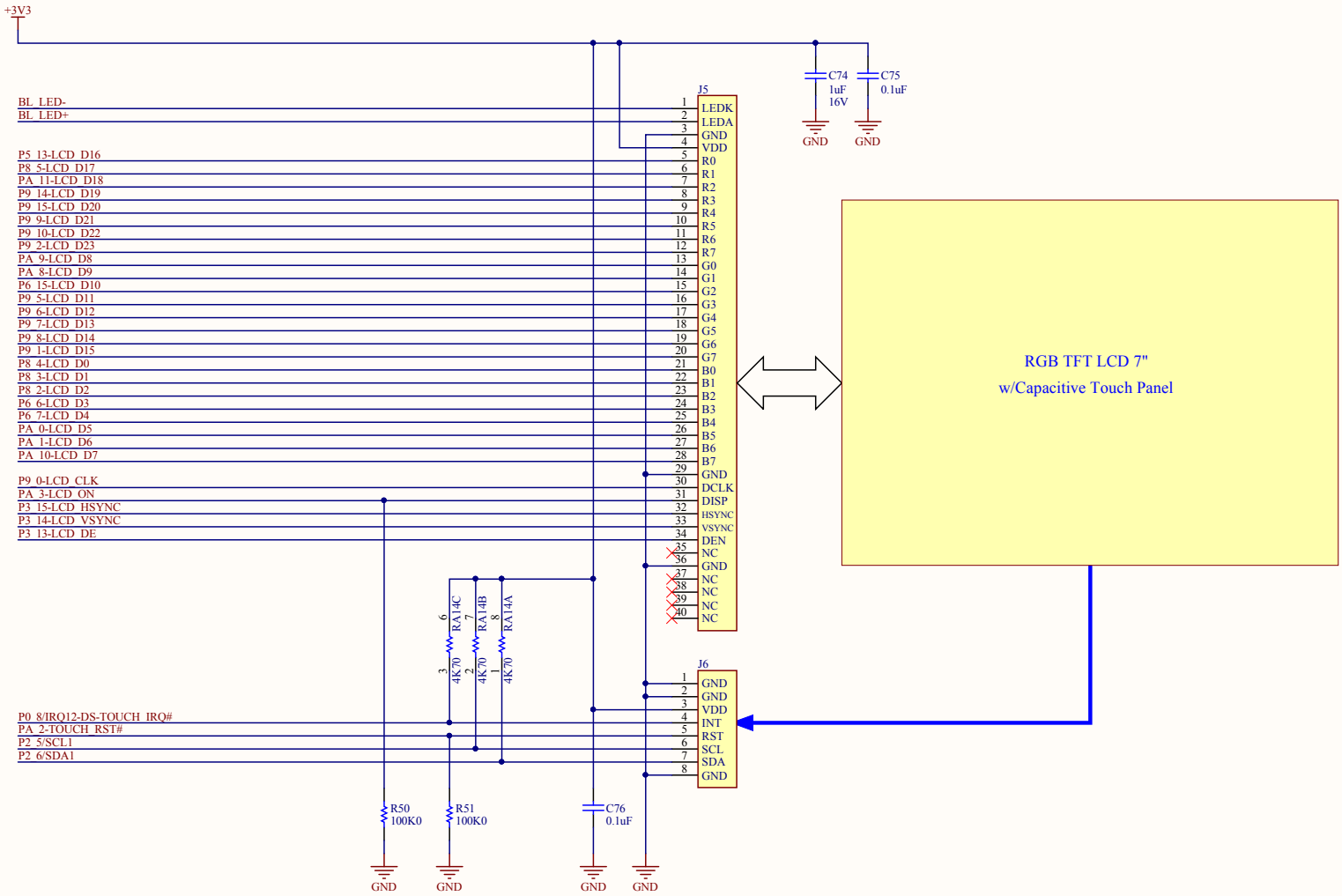

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Renesas Synergy(tm) PE-HMI1 Product Example
TFT LCD 800x480 24-bit RGB

Version: v2.0	PCB Revision: PCB 03
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File: PE-HMI1_v2.0-LCD.SchDoc	

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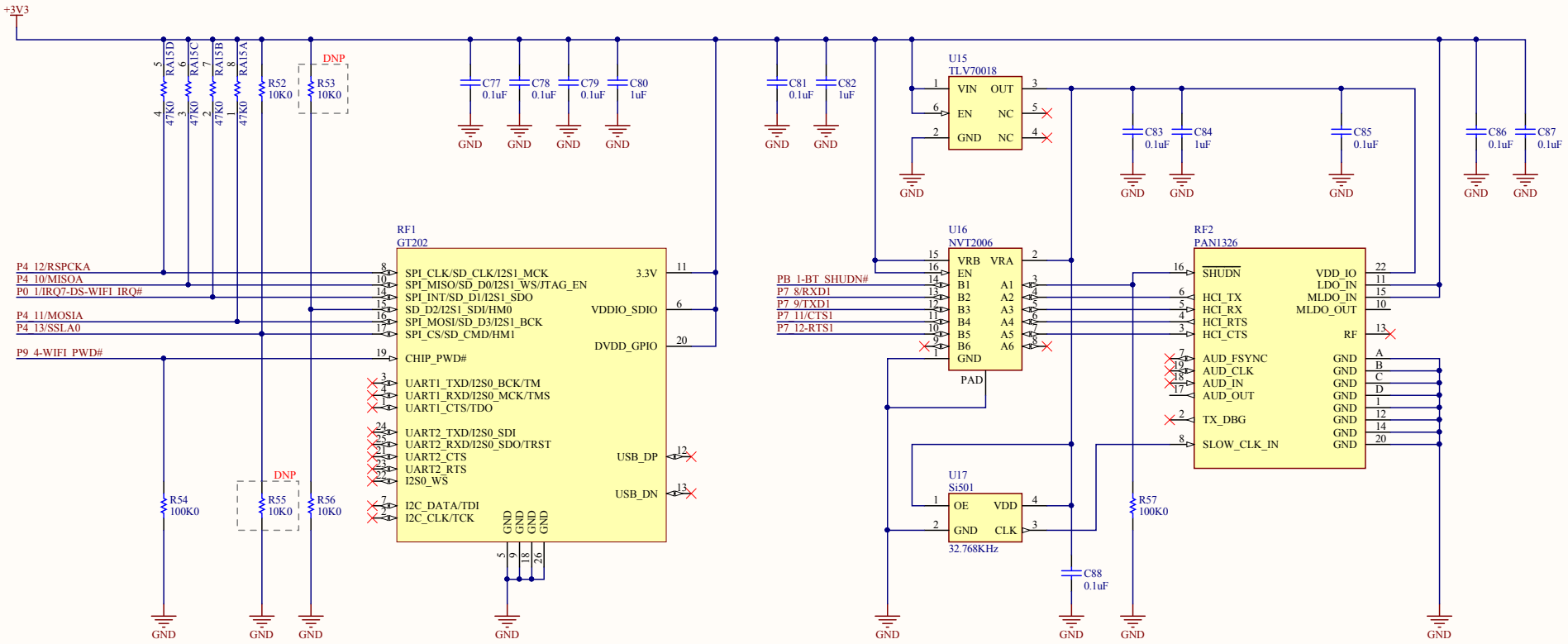

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Renesas Synergy(tm) PE-HMI1 Product Example
WiFi and Bluetooth

Version: v2.0	PCB Revision: PCB 03
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File: PE-HMI1_v2.0-WIFI_BT.SchDoc	

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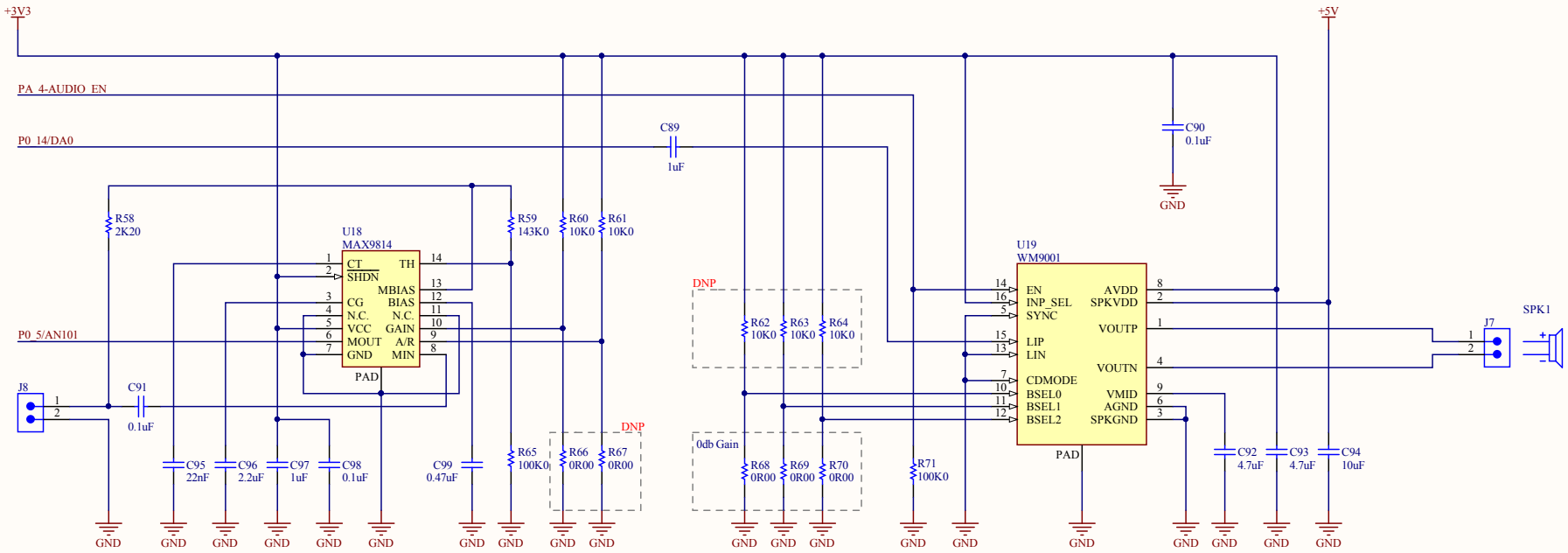

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Renesas Synergy(tm) PE-HMI1 Product Example
Audio Mic Input and Speaker Out

Version: v2.0	PCB Revision: PCB 03
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File: PE-HMI1_v2.0-Audio.SchDoc	

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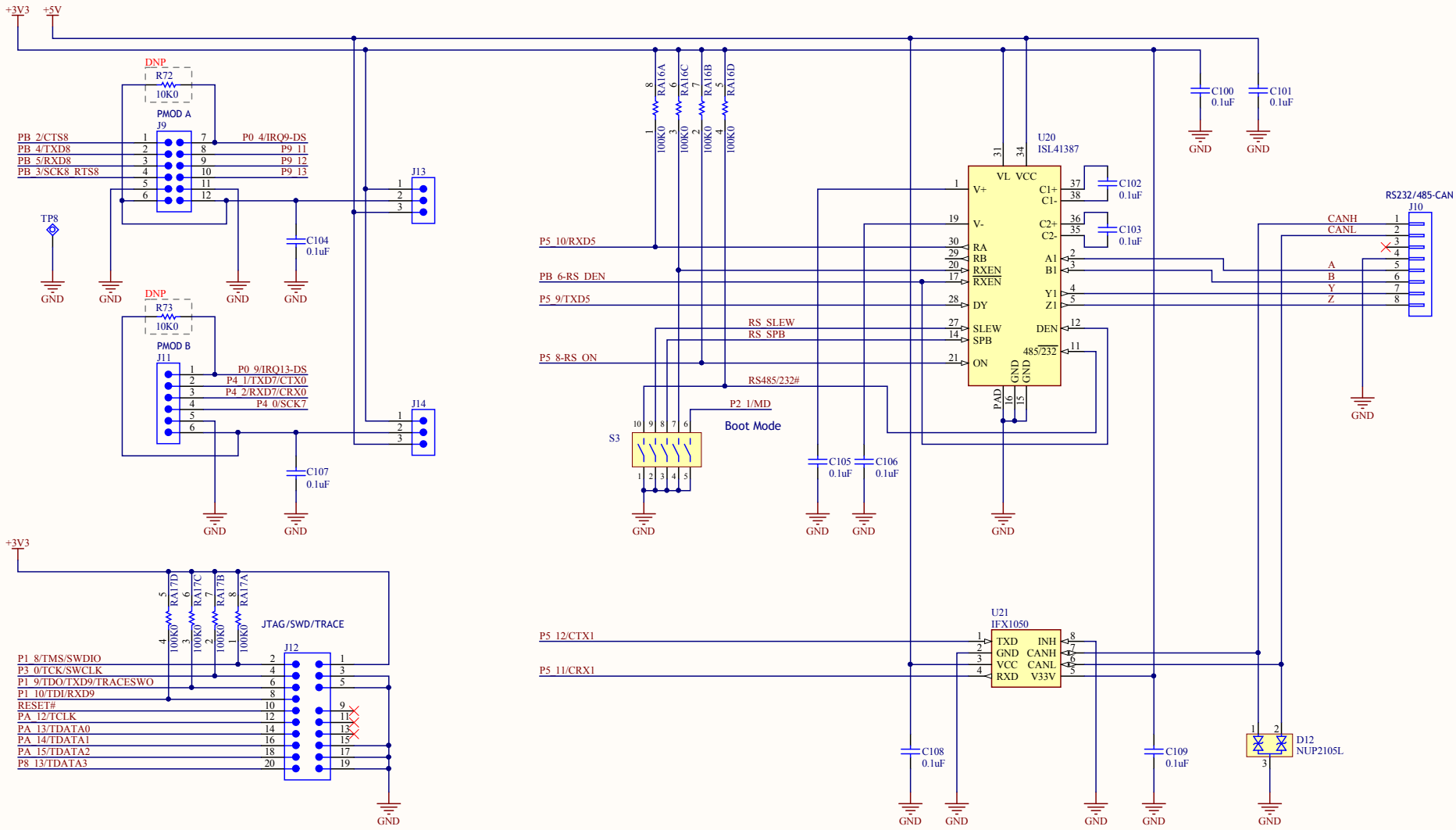

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Renesas Synergy(tm) PE-HMI1 Product Example
PMOD, RS232/485,CAN, Serial Interfaces, GPIO, JTAG

Version: v2.0	PCB Revision: PCB 03
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File: PE-HMI1_v2.0-PMOD_RS_CAN.SchDoc	

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