EK-RA6M3

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Rubber Foot, Clear, 6mm dia, 2mm high
Rubber Foot, Clear, 6mm dia, 2mm high
Rubber Foot, Clear, 6mm dia, 2mm high
Rubber Foot, Clear, 6mm dia, 2mm high
Rubber Foot, Clear, 6mm dia, 2mm high
Rubber Foot, Clear, 6mm dia, 2mm high

REVISION HISTORY		
Revision	Date	Description
0.5	06/14/2019	Prototype initial release
1.0	07/25/2019	Production Release

Renesas EK-RA6M3
Title Page

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File: EK-RA6M3_p01_TitlePage.SchDoc	

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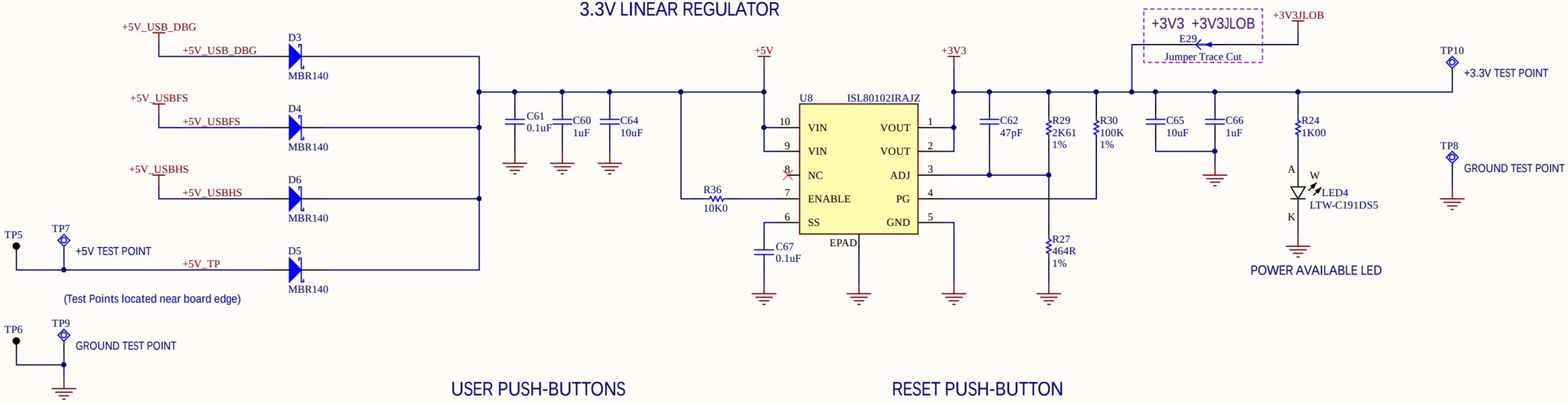
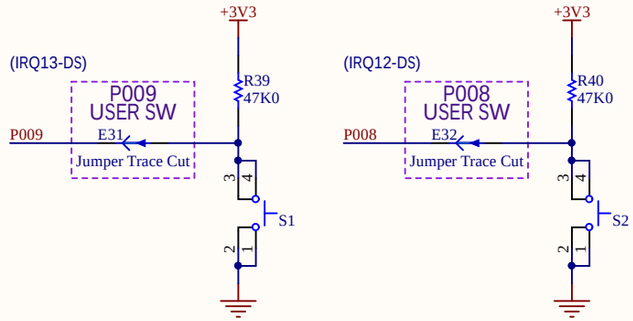
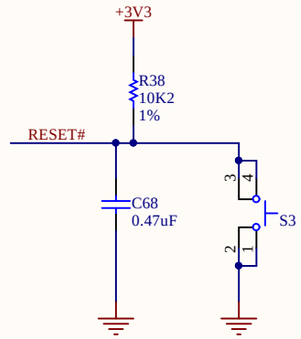
3.3V LINEAR REGULATOR



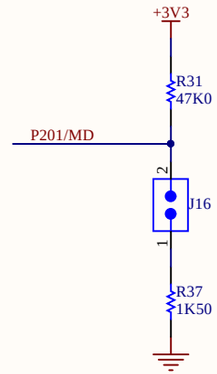
USER PUSH-BUTTONS



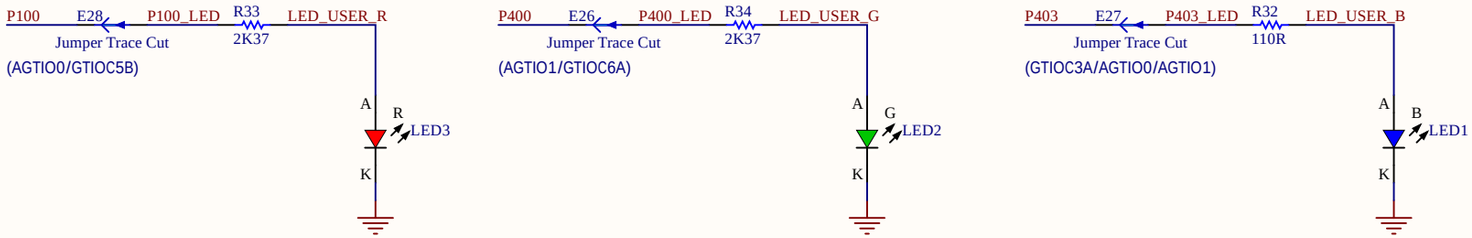
RESET PUSH-BUTTON



MCU BOOT MODE



USER LEDS



Renesas EK-RA6M3 Power Supply and HMI	
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File: EK-RA6M3_p02_Power.SchDoc	
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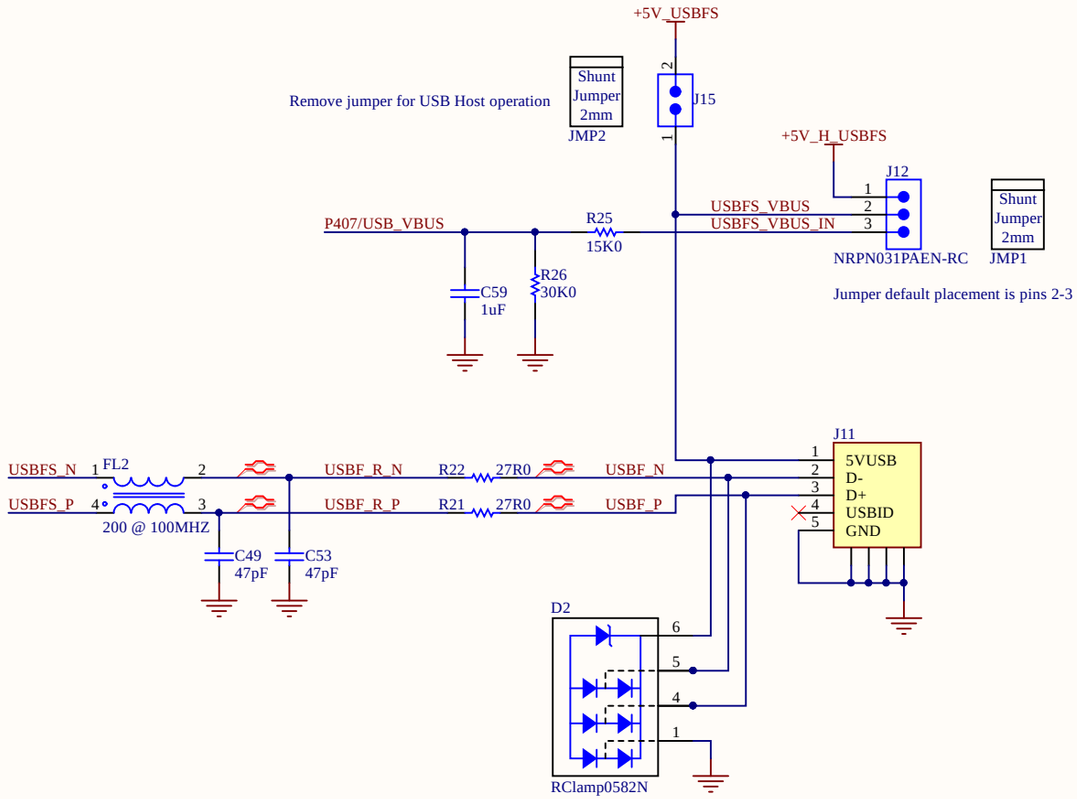
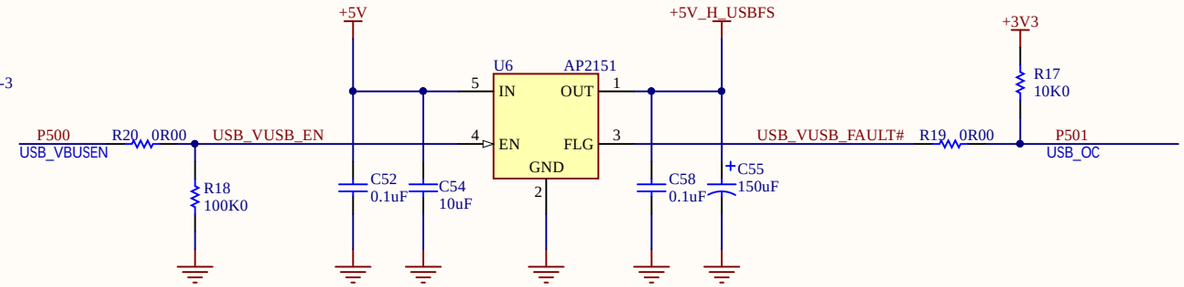
USB FS INTERFACE





USB HOST POWER SUPPLY

TOTAL CURRENT AVAILABLE IS 500mA MAX

Renesas EK-RA6M3 USB FS Interface	
Version: 1	Document Revision: D
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File: EK-RA6M3_p03_USB_FS.SchDoc	6000012 Last Updated: 7/24/2019

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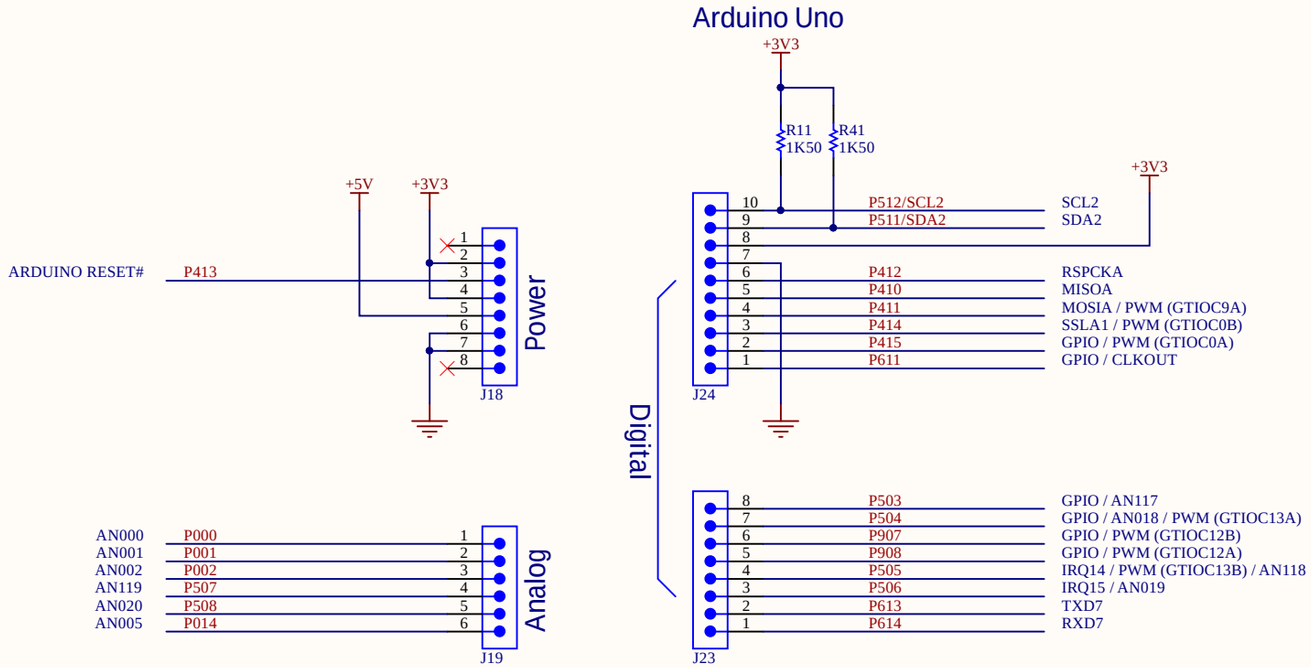

Renesas EK-RA6M3 Ecosystem Interface: Arduino	
Version: 1	Document Revision: D
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File: EK-RA6M3_p04_Arduino.SchDoc	
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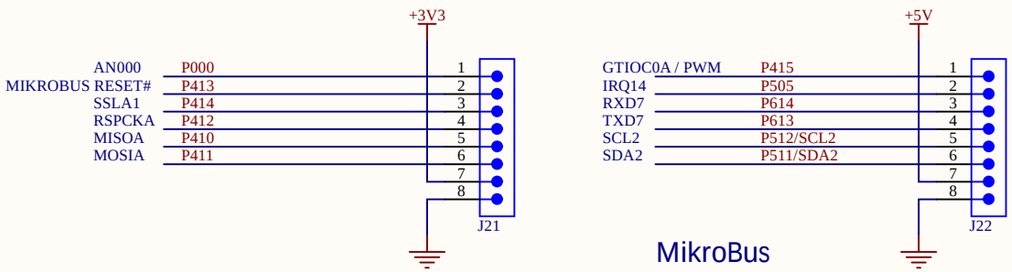

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Version: 1	Document Revision: D
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File: EK-RA6M3_p05_mikrobus.SchDoc	
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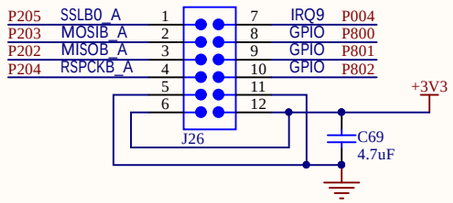
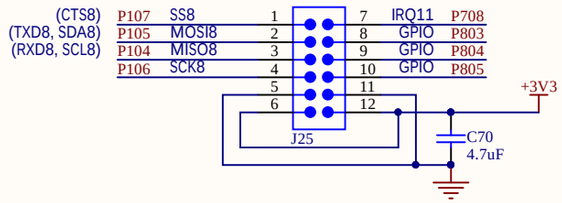
PMOD 1

SPI/UART



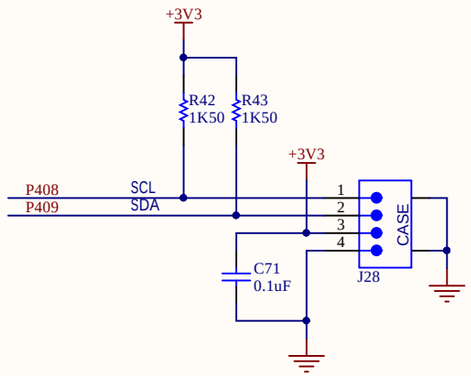
PMOD 2

SPI/UART



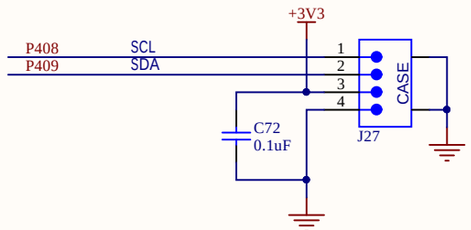
Grove 2

I2C



Grove 1

I2C



Renesas EK-RA6M3 PMOD, Grove	
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File: EK-RA6M3_p06_PMOD.SchDoc	

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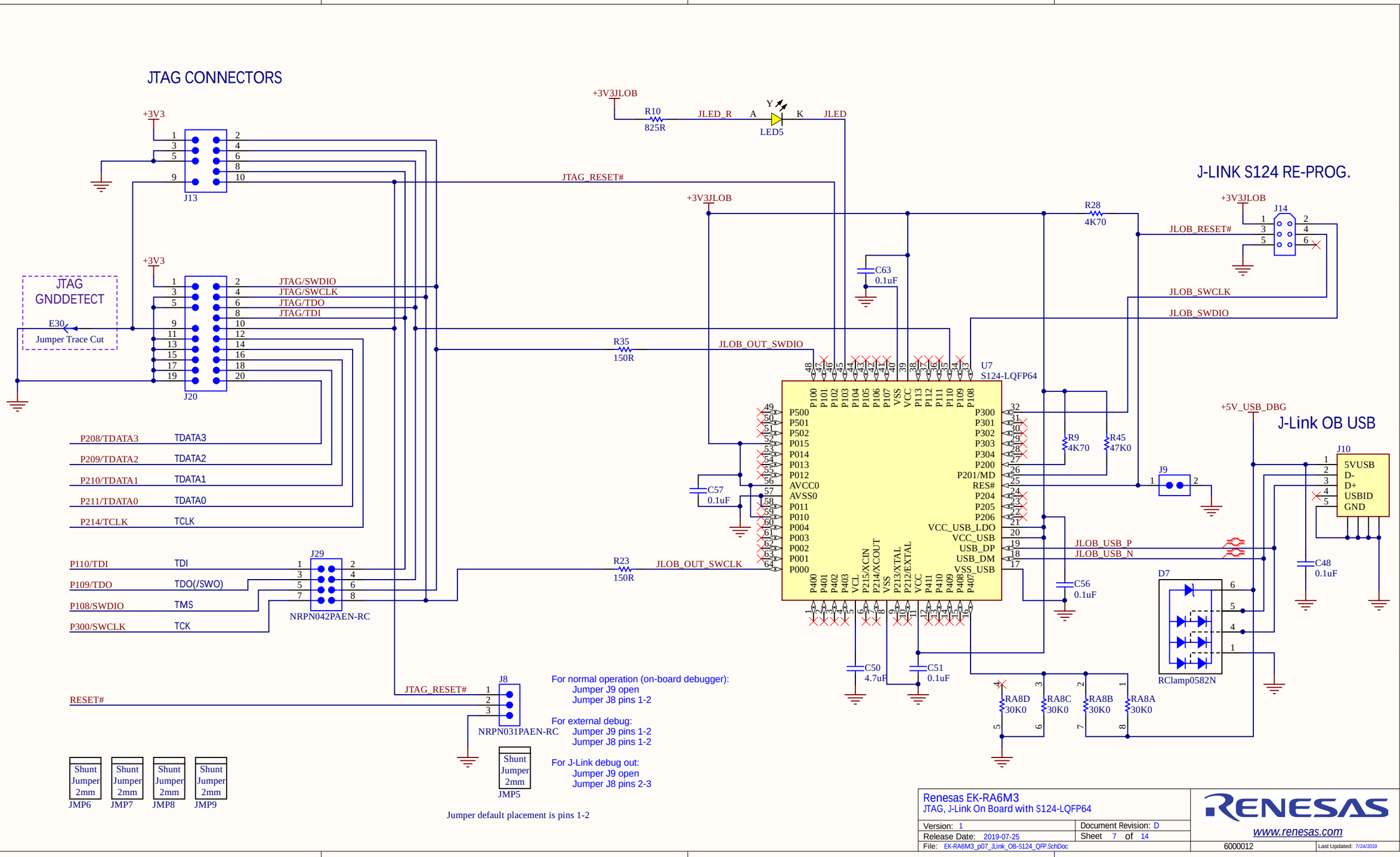
JTAG CONNECTORS
J-LINK S124 RE-PROG.
J-Link OB USB
+3V3
+3V3JLOB
J13
J20
J29
J14
J10
J9
J8
JTAG GNDDETECT
E30
Jumper Trace Cut
JTAG_RESET#
JTAG/SWDIO
JTAG/SWCLK
JTAG/TDO
JTAG/TDI
JLOB_RESET#
JLOB_SWCLK
JLOB_SWDIO
JLOB_OUT_SWDIO
JLOB_OUT_SWCLK
R10
825R
JLED_R
LED5
JLED
R28
4K70
R35
150R
R23
150R
R9
4K70
R45
47K0
C63
0.1uF
C57
0.1uF
C56
0.1uF
C48
0.1uF
C50
4.7uF
C51
0.1uF
U7
S124-LQFP64
P208/TDATA3
P209/TDATA2
P210/TDATA1
P211/TDATA0
P214/TCLK
TDATA3
TDATA2
TDATA1
TDATA0
TCLK
P110/TDI
P109/TDO
P108/SWDIO
P300/SWCLK
TDI
TDO(/SWO)
TMS
TCK
NRPN042PAEN-RC
RESET#
NRPN031PAEN-RC
5VUSB
D-
D+
USBID
GND
JLOB_USB_P
JLOB_USB_N
D7
RClamp0582N
RA8D
30K0
RA8C
30K0
RA8B
30K0
RA8A
30K0
Shunt Jumper 2mm
JMP6
JMP7
JMP8
JMP9
JMP5
For normal operation (on-board debugger):
Jumper J9 open
Jumper J8 pins 1-2
For external debug:
Jumper J9 pins 1-2
Jumper J8 pins 1-2
For J-Link debug out:
Jumper J9 open
Jumper J8 pins 2-3
Jumper default placement is pins 1-2
Renesas EK-RA6M3
JTAG, J-Link On Board with S124-LQFP64
Version: 1
Release Date: 2019-07-25
File: EK-RA6M3_p07_JLink_OB-S124_QFP.SchDoc
Document Revision: D
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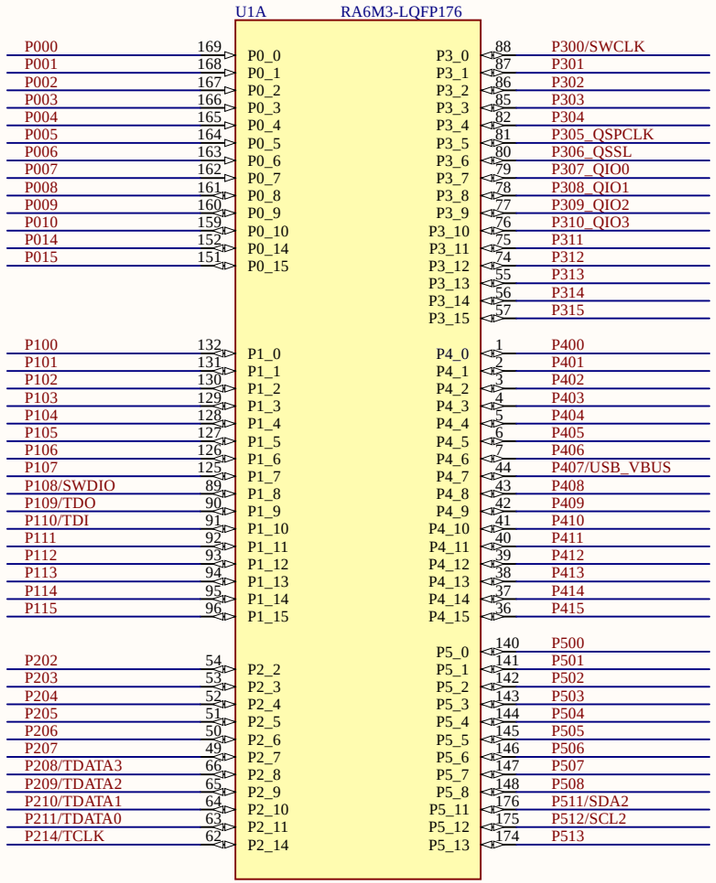
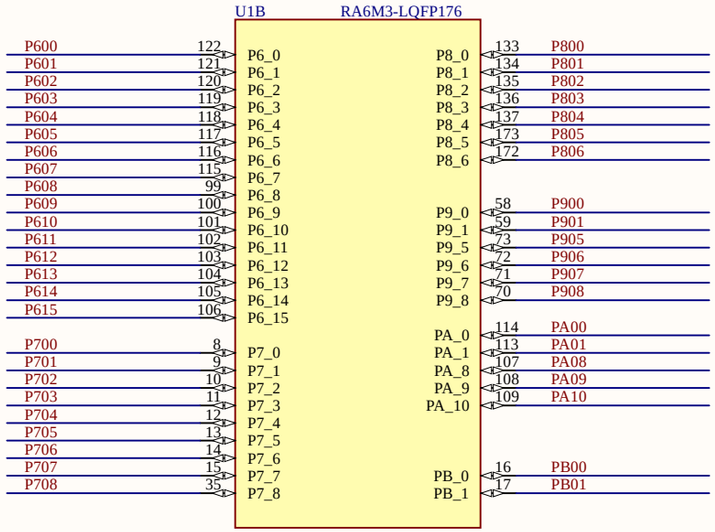
Last Updated: 7/24/2019





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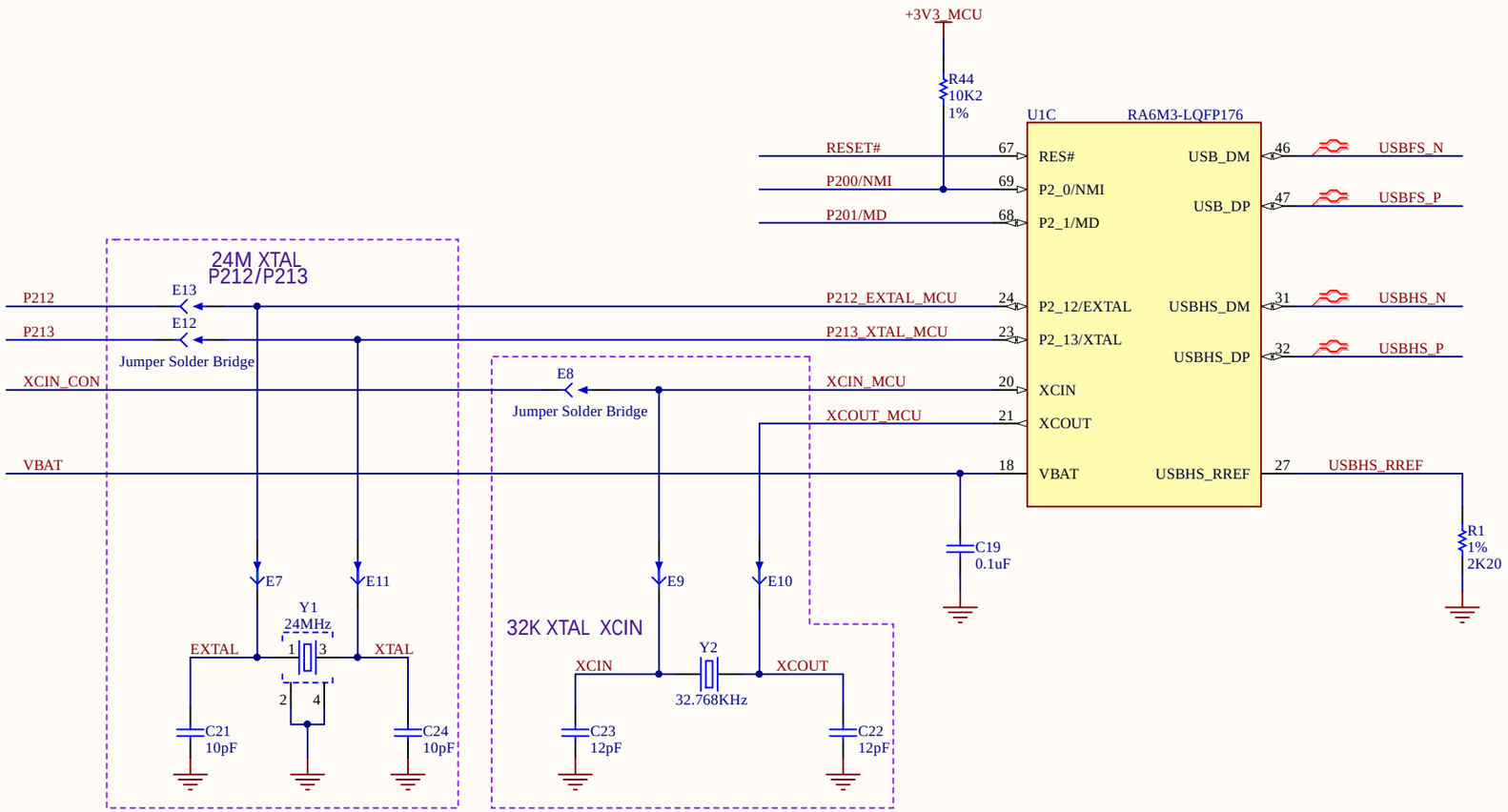

Renesas EK-RA6M3 S5D9 MCU	
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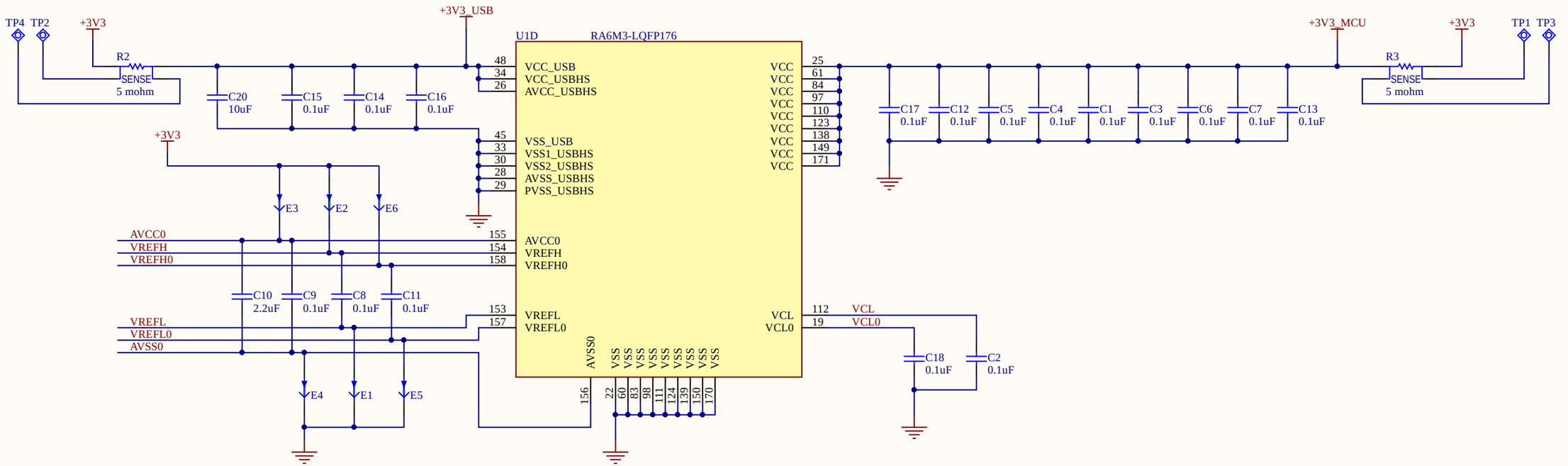

Renesas EK-RA6M3	
MCU Power	
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File: EK-RA6M3_p10_MCU_PWR.SchDoc	
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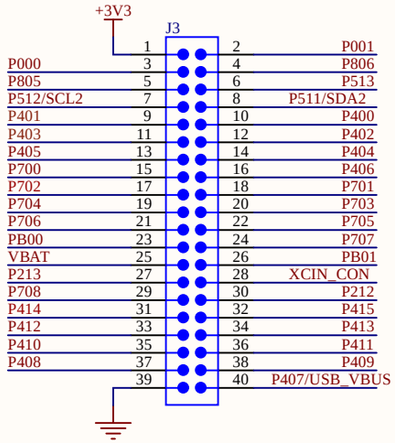
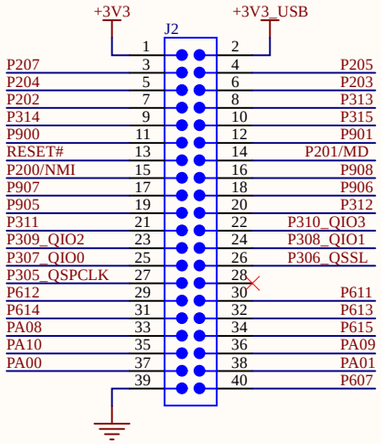
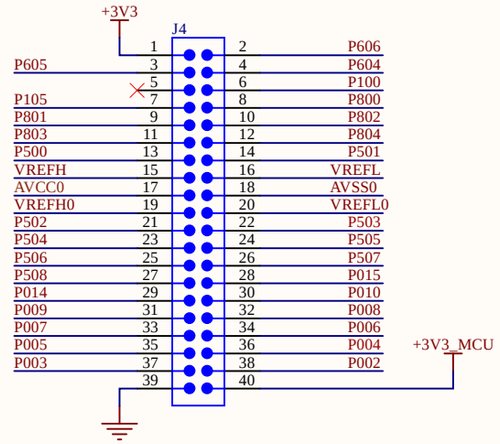
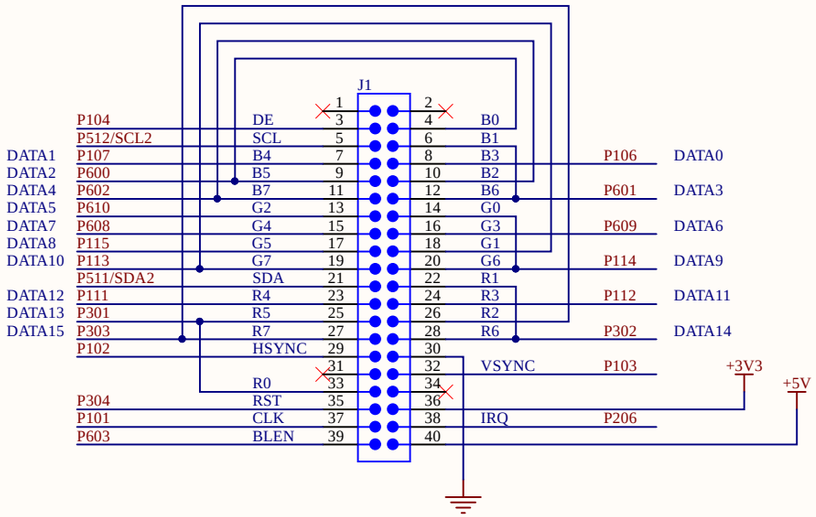
PIN HEADERS







LCD Module connected as Parallel RGB565 color depth.



Renesas EK-RA6M3 MCU Pin Header Connectors	RENESAS www.renesas.com
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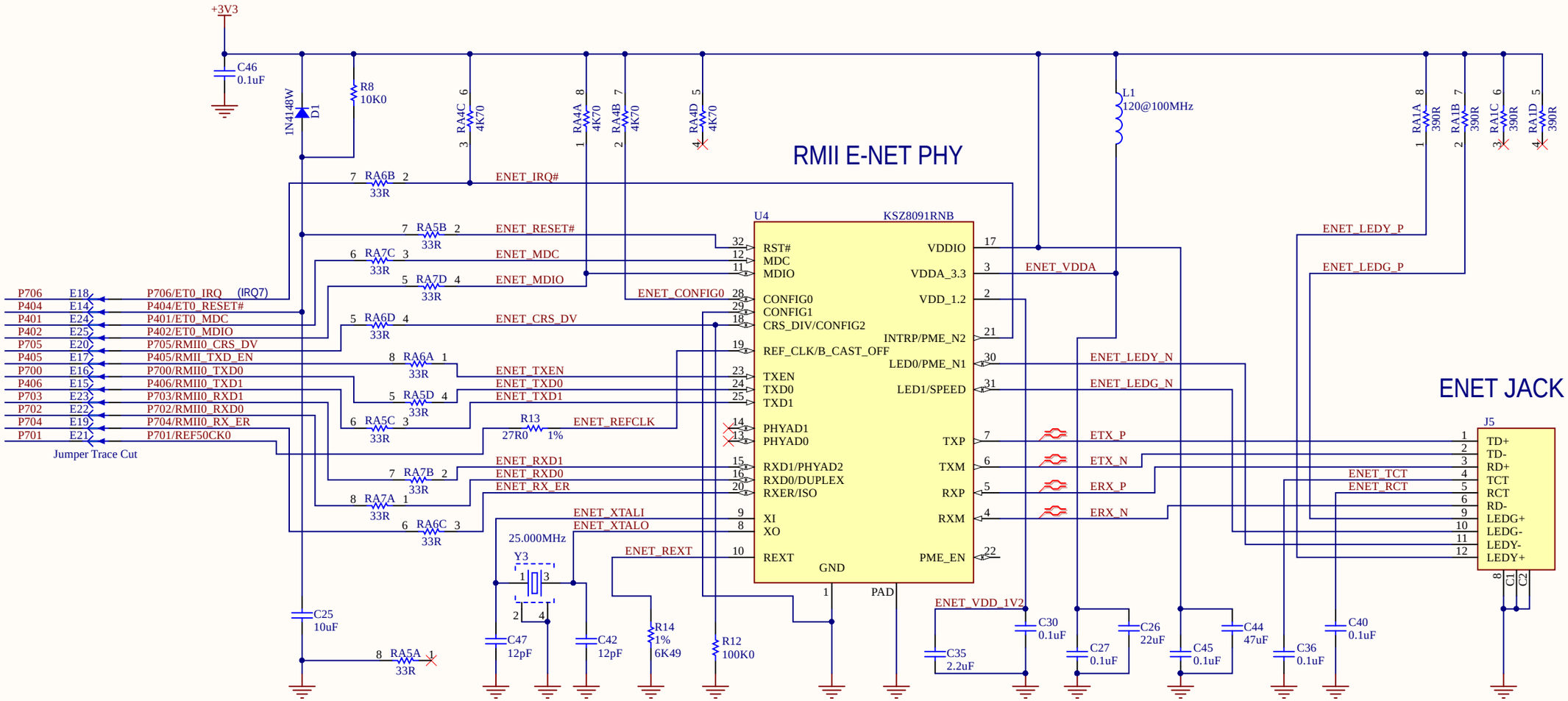
File: EK-RA6M3_p11_Pin-Headers.SchDoc	6000012 / Last Updated: 7/12/2019



Renesas EK-RA6M3 Ethernet	
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File: EK-RA6M3_p12_Ethernet.SchDoc	

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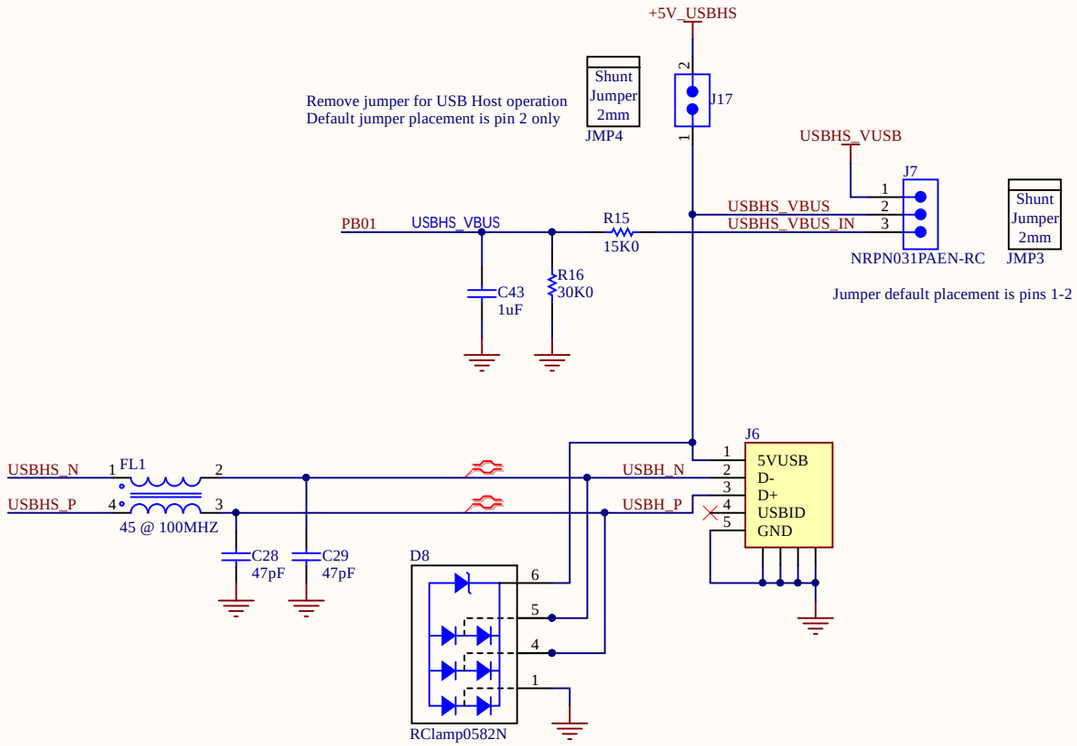
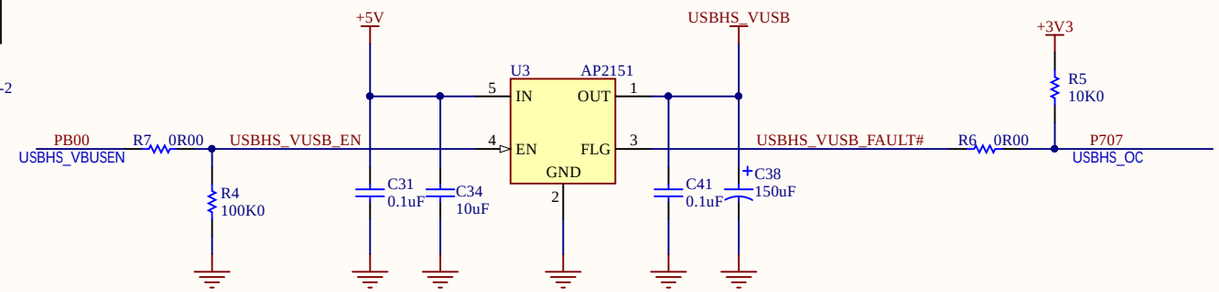
USB HS INTERFACE





TOTAL CURRENT AVAILABLE IS 500mA MAX

Renesas EK-RA6M3 USB High Speed	
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File: EK-RA6M3_p13_USB_HS.SchDoc	
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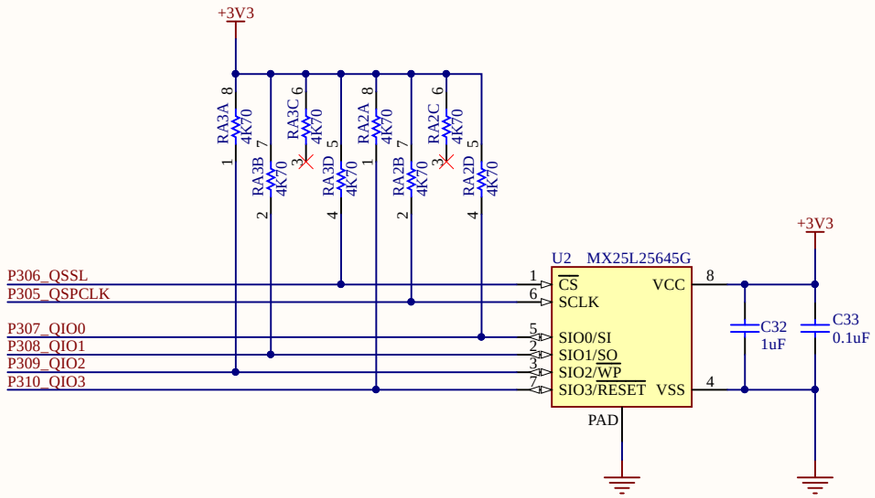

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