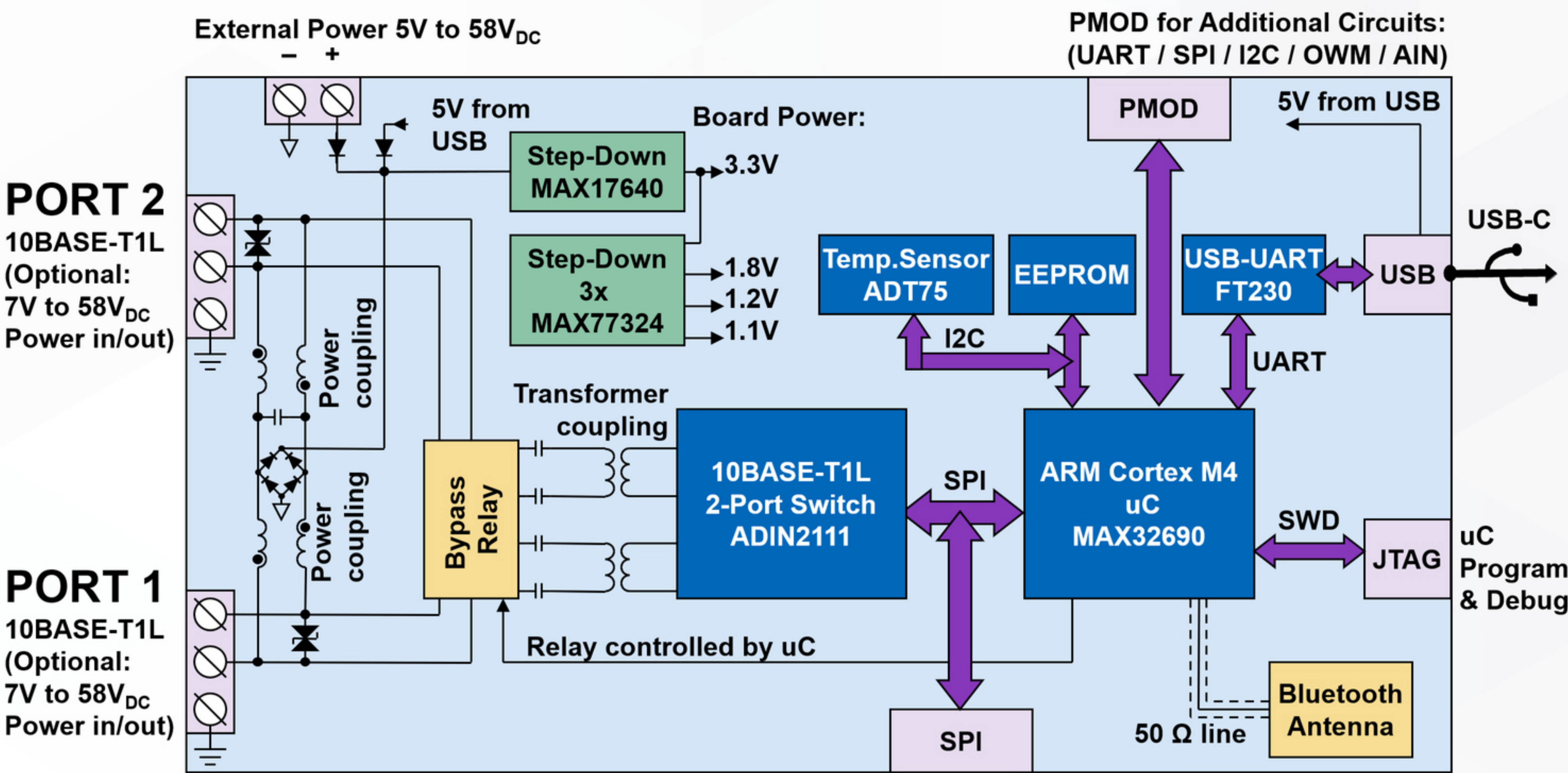


EVAL-ADIN2111D1Z

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED



CONTENT:

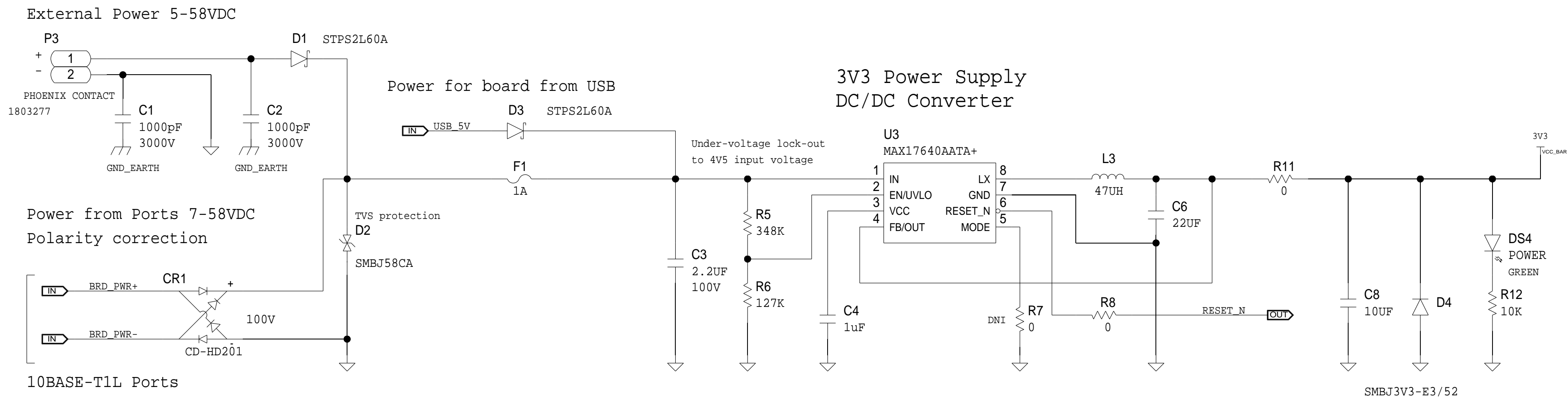
- Page 1: Block Diagram
- Page 2: Power Supplies MAX17640 and MAX77324
- Page 3: ARM Cortex M4 uC MAX32690
- Page 4: 10BASE-T1L Switch ADIN2111
- Page 5: USB, JTAG, EEPROM, PMOD, Temp.Sensor ADT75
- Page 6: 10BASE-T1L Connections

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		DESIGN VIEW Samuel Kosik / Michal Brychta	DRAWING NO. 02_081264	REV D	
		PTD ENGINEER Patrick Duignan	SIZE C	SCALE 1:1	SHEET 1 OF 6

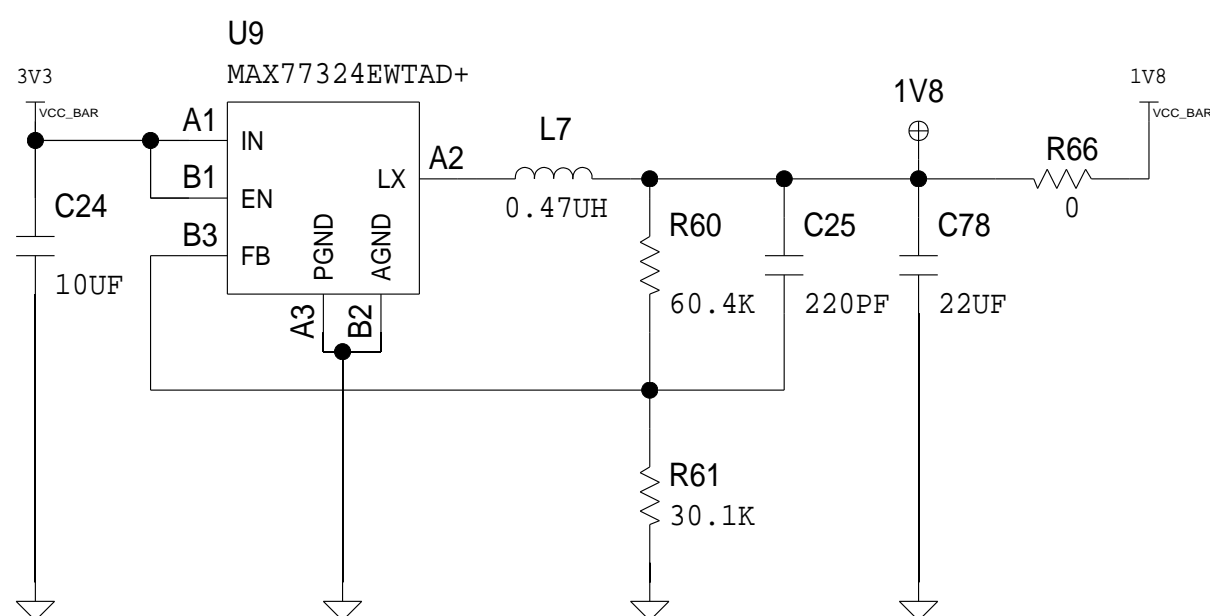
Power Supplies

MAX17640 and MAX77324

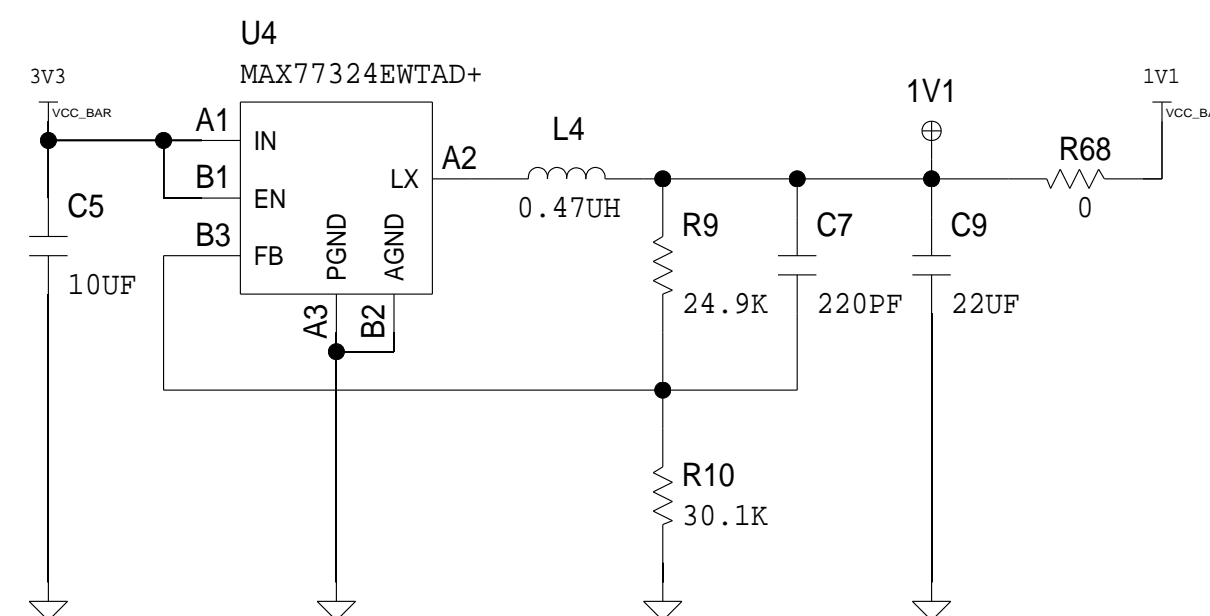
REVISIONS			
REV	DESCRIPTION	DATE	APPROVED



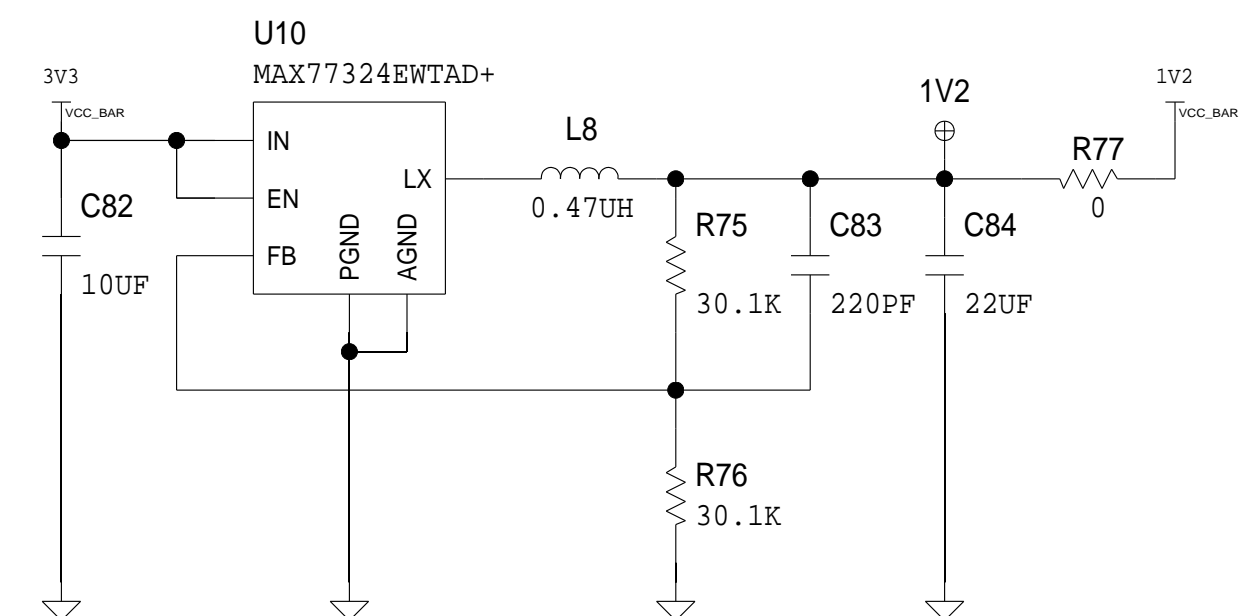
1V8 Power Supply DC/DC Converter



1V1 Power Supply DC/DC Converter



1V2 Power Supply DC/DC Converter



MAX32690 Supplies:

VCORE = 1V1
BLELDO = 1V2
VDDA = 1V8
VDDIO = 1V8
VDDIOH = 3V3

ADIN2111 Supplies:

DVDD = 1V1
VDDIO = 1V8
ADV_V_L = 1V8
AVDD_H = 3V3



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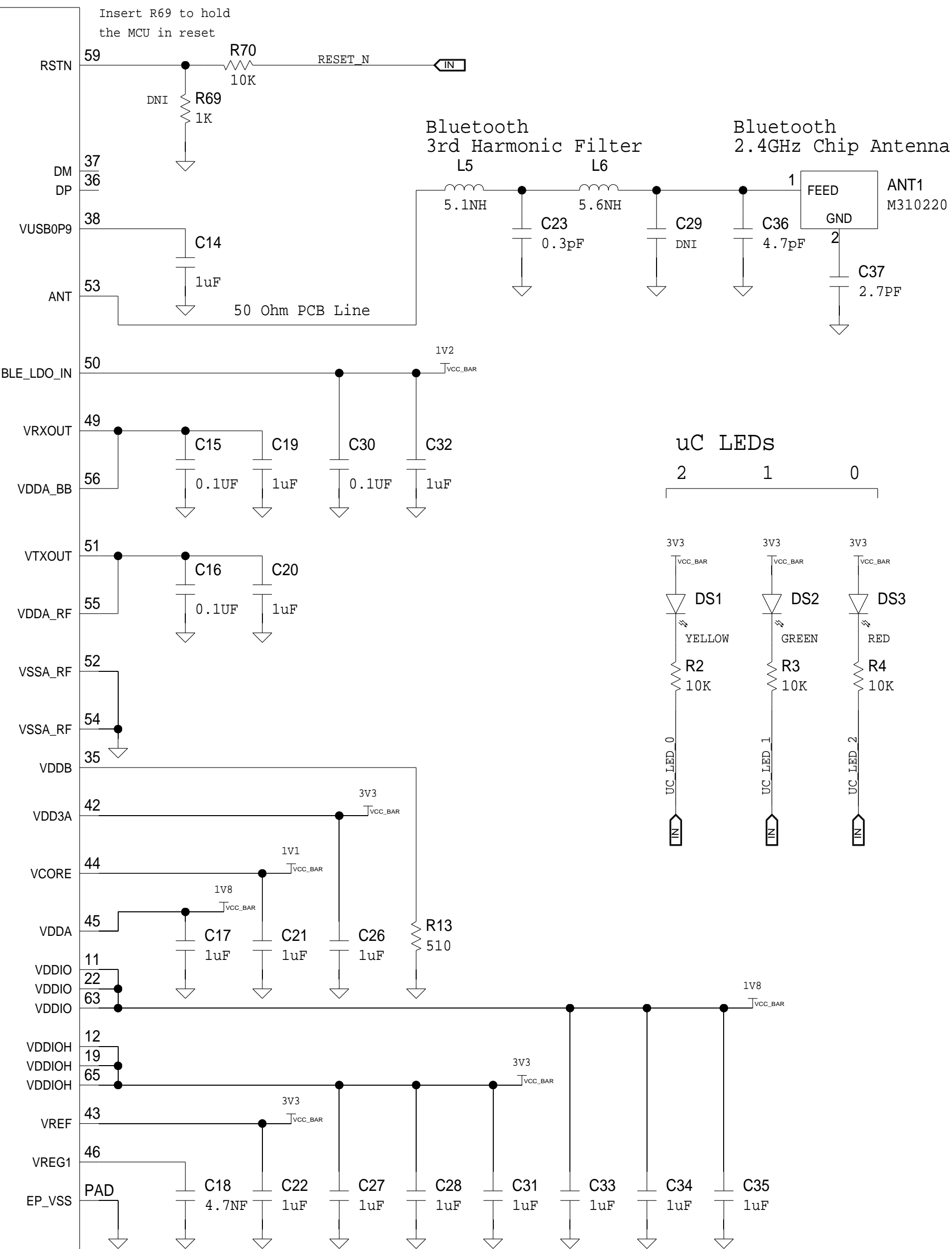
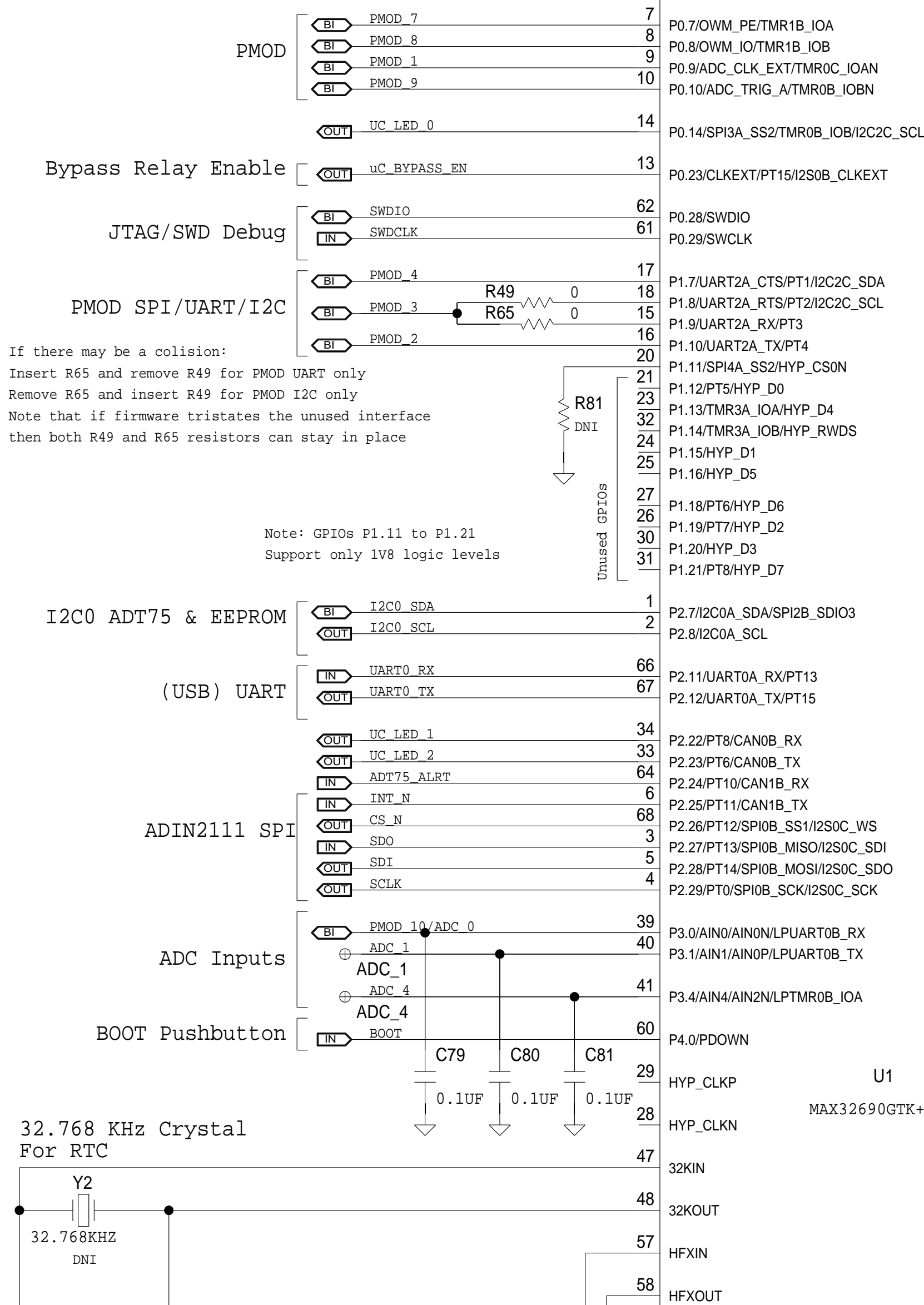
SCHEMATIC

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PTD ENGINEER Patrick Duignan	SIZE C	SCALE 1:1	SHEET 2 OF 6

ARM Cortex M4 uC MAX32690

REVISIONS

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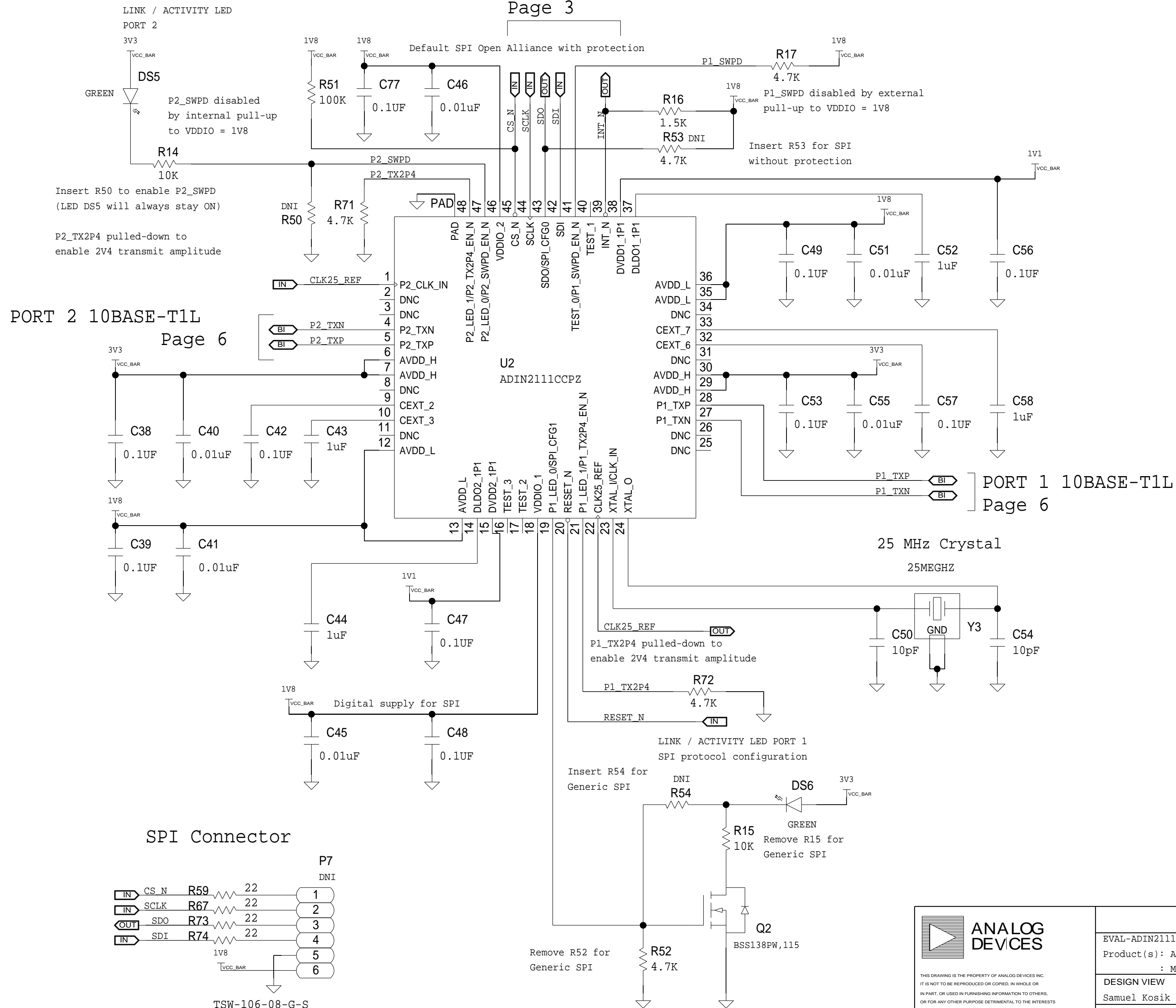
EVAL-ADIN2111D1Z Product(s): ADIN2111, MAX32690 : MAX17640, MAX77324, ADT75			
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PTD ENGINEER Patrick Duignan	SIZE C	SCALE 1:1	SHEET 3 OF 6

10BASE-T1L Switch ADIN2111

REVISIONS

REV	DESCRIPTION	DATE	APPROVED

uC SPI Page 3



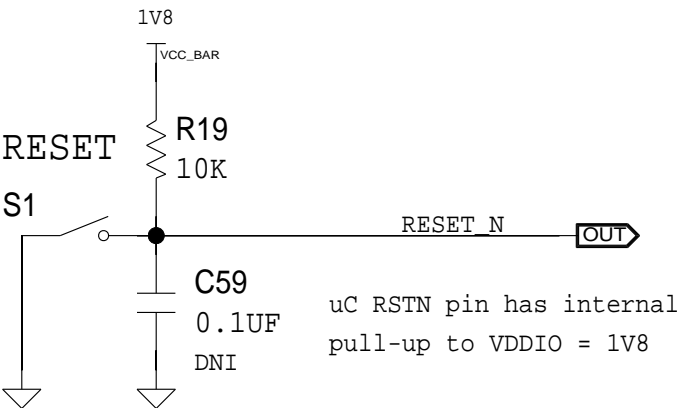
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EVAL-ADIN2111D1Z Product(s): ADIN2111, MAX32690 : MAX17640, MAX77324, ADT75			
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PTD ENGINEER Patrick Duignan	SIZE C	SCALE 1:1	SHEET 4 OF 6

REVISIONS			
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Board RESET



3V3
VCC_BAR

R21
510

BOOT
S2

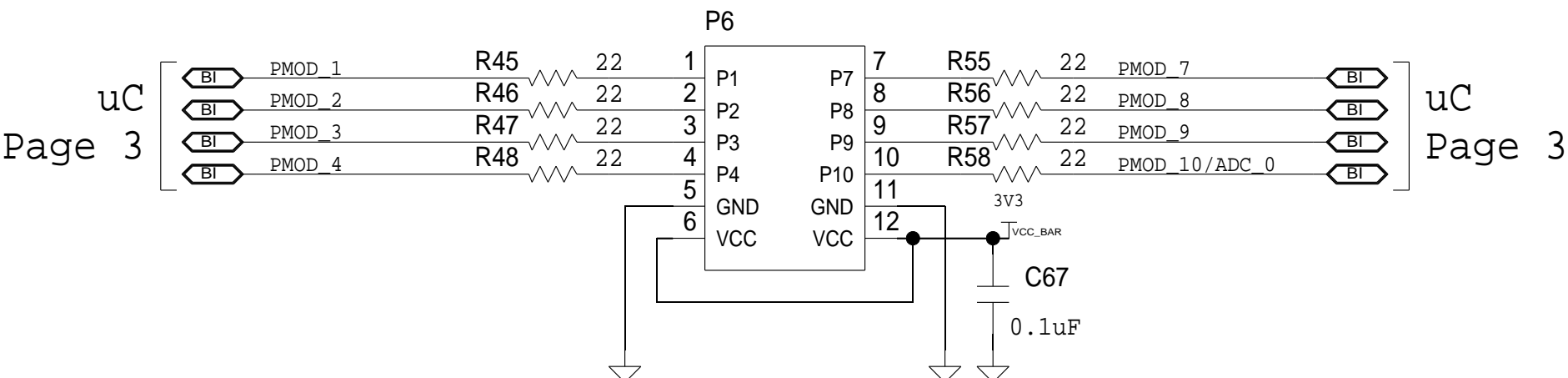
B3U-1000P

BOOT

OUT

uC P4.0 pin can only
use VDDIOH = 3V3

PMOD Connector
for additional hardware
over SPI or UART or I2C



Device ID: 1010 000

U8

AT24C64D-MAHM-T

3V3

VCC_BAR

A0 VCC

A1 WP

A2 SCL

GND SDA

PAD

PAD

I2C0_SCL

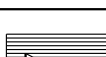
I2C0_SDA

IN

BI

uC I2C

Page 3

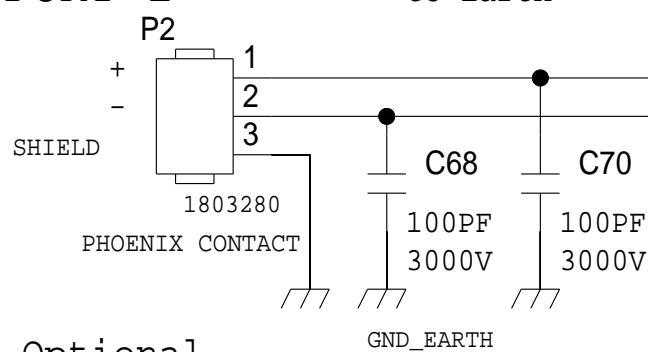
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	<p>EVAL-ADIN2111D1Z</p> <p>Product(s) : ADIN2111, MAX32690</p> <p style="text-align: right;">: MAX17640, MAX77324, ADT75</p>			
	<p>DESIGN VIEW</p> <p>Samuel Kosik / Michal Brychta</p>		<p>DRAWING NO.</p> <p>02_081264</p>	
<p>PTD ENGINEER</p> <p>Patrick Duignan</p>		<p>SIZE</p> <p>C</p>	<p>SCALE</p> <p>1:1</p>	<p>SHEET 5 OF 6</p>

10BASE-T1L Connections

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED

CONNECTOR
10BASE-T1L
PORT 2

Disturbance
Signal Path
to Earth



Optional
Power
in/out
7-58VDC

Place TVS as close as
possible to P2

Low capacitance
TVS protection
D7
SP4020-01FTG-C
Vr=58V TVS diode

D5
SMBJ58CA
Vr=58V TVS diode

DNI
R34
0
Insert to ignore
relay bypass

Coupling
Capacitors

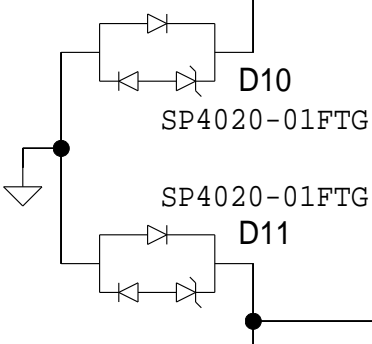
C73
0.22uF
100V
R36
1MEG

R37
1MEG
C74
0.22uF
100V

Isolation
Transformer

T2
2200UH

ADIN2111
ESD/Surge
Protection



ADIN2111
Page 4

Power
Coupling
Inductor

R62
0

L2

R63
0

47UH

Power from Ports

R32
0
BRD_PWR+ OUT

R33
0
BRD_PWR- OUT

POWER Page 2

Power
Coupling
Inductor

C72
4.7UF
100V

L1

R31
0

R64
0

47UH

Place TVS as close as
possible to P1

Low capacitance
TVS protection
D8
SP4020-01FTG-C
Vr=3.3V TVS diode

D6
SMBJ58CA
Vr=58V TVS diode

Insert to ignore
relay bypass
DNI
R35
0

Coupling
Capacitors

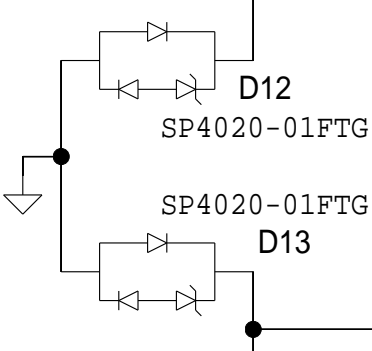
C75
0.22uF
100V
R38
1MEG

R39
1MEG
C76
0.22uF
100V

Isolation
Transformer

T1
2200UH

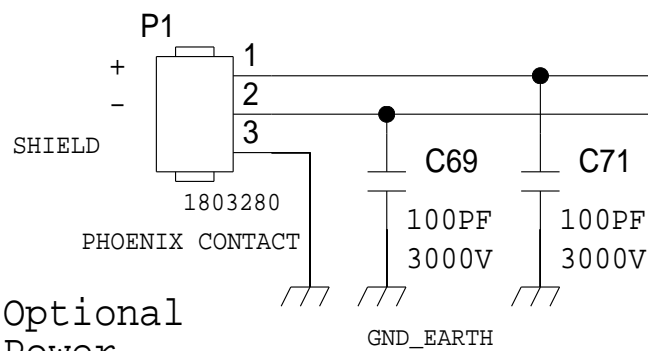
ADIN2111
ESD/Surge
Protection



ADIN2111
Page 4

CONNECTOR
10BASE-T1L
PORT 1

Disturbance
Signal Path
to Earth



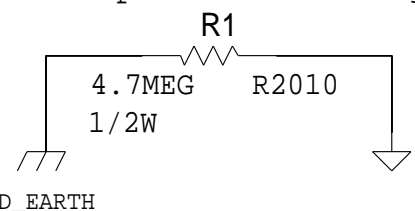
Optional
Power
in/out
7-58VDC

Mounting holes 3.2mm
exposed contact ring

MTH1
GND_EARTH

MTH2
GND_EARTH

Resistor. earth to ground
for capacitors discharge



Ground
Test
Point
TP3
GND



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PTD ENGINEER Patrick Duignan	SIZE C	SCALE 1:1	SHEET 6 OF 6