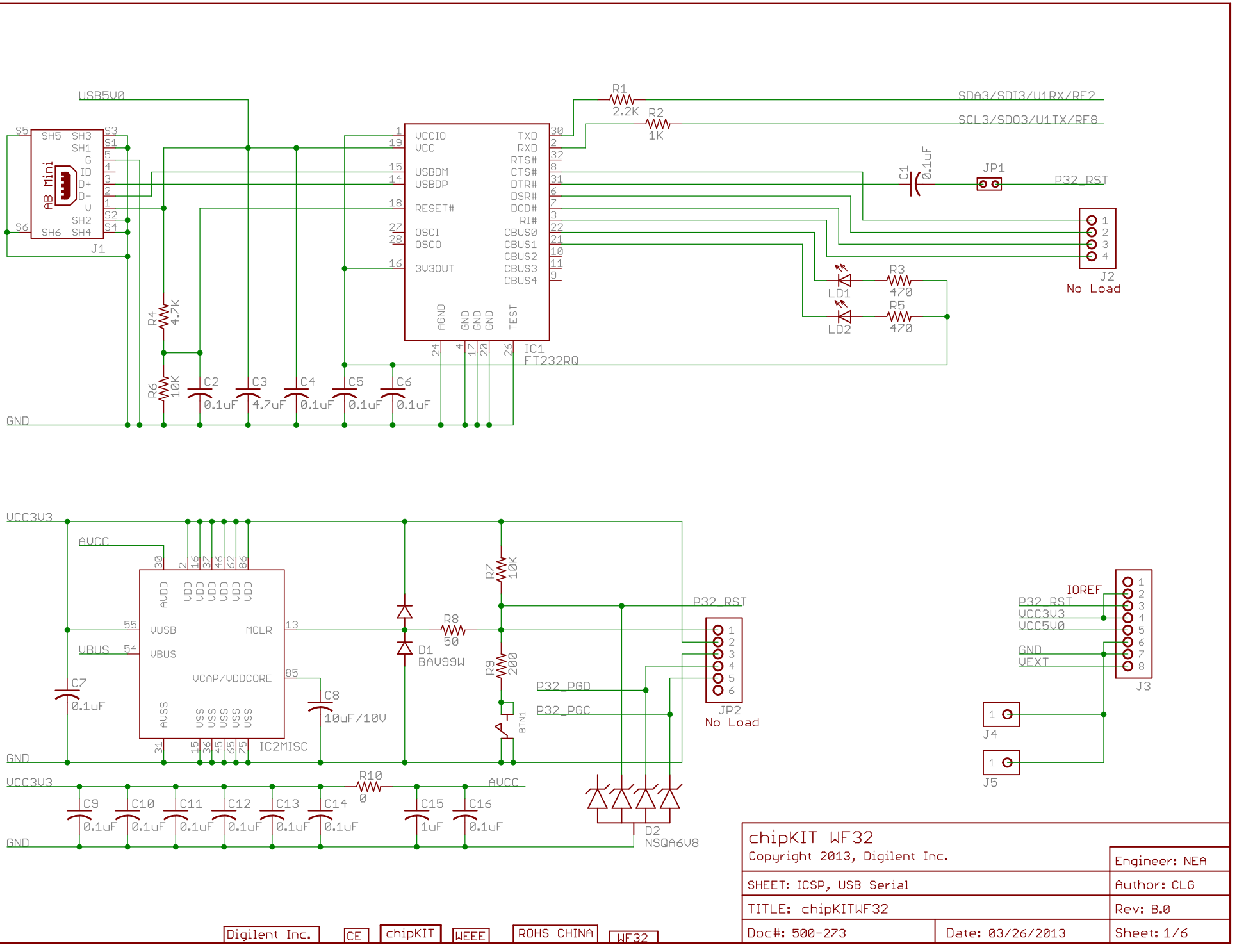

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SHEET: ICSP, USB Serial		Author: CLG
TITLE: chipKITWF32		Rev: B.0
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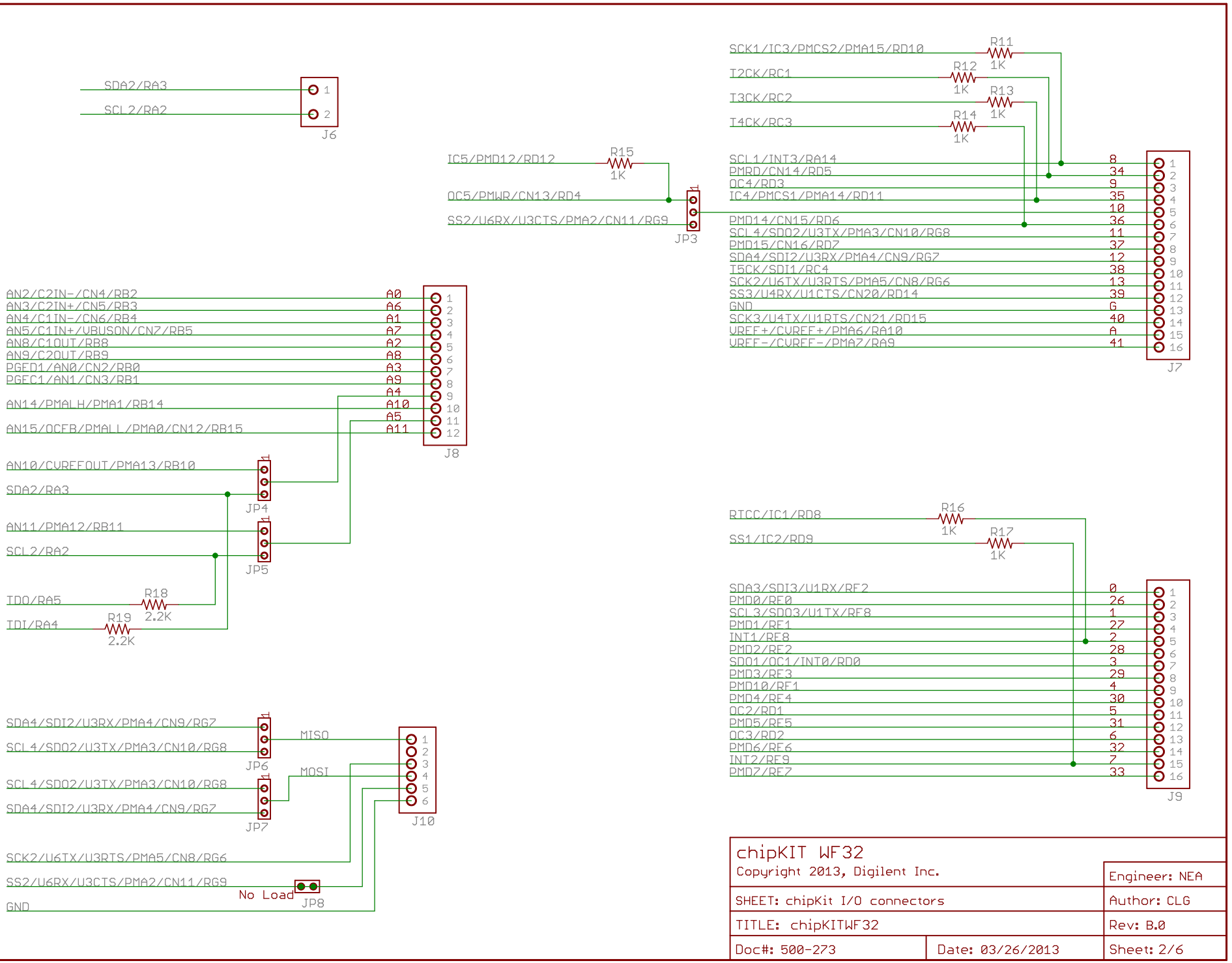
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SCL2/RA2
J6
IC5/PMD12/RD12
R15
1K
OC5/PMWR/CN13/RD4
SS2/U6RX/U3CTS/PMA2/CN11/RG9
JP3
SCK1/IC3/PMCS2/PMA15/RD10
R11
1K
I2CK/RC1
R12
1K
I3CK/RC2
R13
1K
I4CK/RC3
R14
1K
SCL1/INT3/RA14
PMRD/CN14/RD5
OC4/RD3
IC4/PMCS1/PMA14/RD11
PMD14/CN15/RD6
SCL4/SDO2/U3TX/PMA3/CN10/RG8
PMD15/CN16/RD7
SDA4/SDI2/U3RX/PMA4/CN9/RG7
T5CK/SDI1/RC4
SCK2/U6TX/U3RTS/PMA5/CN8/RG6
SS3/U4RX/U1CTS/CN20/RD14
GND
SCK3/U4TX/U1RTS/CN21/RD15
VREF+/CVREF+/PMA6/RA10
VREF-/CVREF-/PMA7/RA9
J7
AN2/C2IN-/CN4/RB2
AN3/C2IN+/CN5/RB3
AN4/C1IN-/CN6/RB4
AN5/C1IN+/VBUSON/CN7/RB5
AN8/C1OUT/RB8
AN9/C2OUT/RB9
PGED1/AN0/CN2/RB0
PGEC1/AN1/CN3/RB1
AN14/PMALH/PMA1/RB14
AN15/OCFB/PMALL/PMA0/CN12/RB15
A0
A6
A1
A7
A2
A8
A3
A9
A4
A10
A5
A11
J8
AN10/CVREFOUT/PMA13/RB10
SDA2/RA3
JP4
AN11/PMA12/RB11
SCL2/RA2
JP5
TDO/RA5
R18
2.2K
TDI/RA4
R19
2.2K
RTCC/IC1/RD8
R16
1K
SS1/IC2/RD9
R17
1K
SDA3/SDI3/U1RX/RF2
PMD0/RE0
SCL3/SDO3/U1TX/RF8
PMD1/RE1
INT1/RE8
PMD2/RE2
SDO1/OC1/INT0/RD0
PMD3/RE3
PMD10/RE1
PMD4/RE4
OC2/RD1
PMD5/RE5
OC3/RD2
PMD6/RE6
INT2/RE9
PMD7/RE7
J9
SDA4/SDI2/U3RX/PMA4/CN9/RG7
SCL4/SDO2/U3TX/PMA3/CN10/RG8
JP6
MISO
SCL4/SDO2/U3TX/PMA3/CN10/RG8
SDA4/SDI2/U3RX/PMA4/CN9/RG7
JP7
MOSI
J10
SCK2/U6TX/U3RTS/PMA5/CN8/RG6
SS2/U6RX/U3CTS/PMA2/CN11/RG9
No Load
JP8
GND
chipKIT WF32
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SHEET: chipKit I/O connectors
Author: CLG
TITLE: chipKITWF32
Rev: B.0
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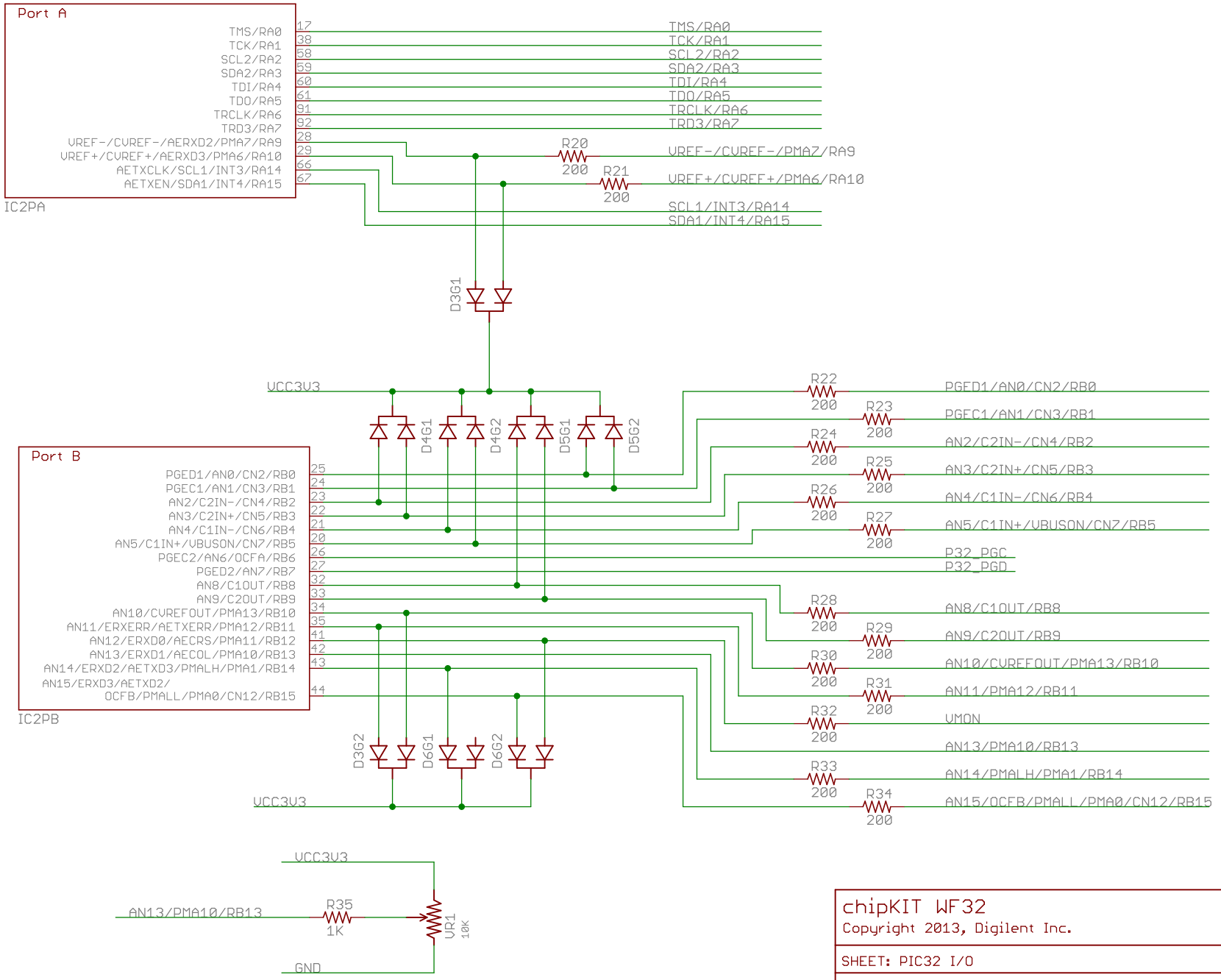
Port A
TMS/RA0
TCK/RA1
SCL2/RA2
SDA2/RA3
TDI/RA4
TDO/RA5
TRCLK/RA6
TRD3/RA7
VREF-/CVREF-/AERXD2/PMA7/RA9
VREF+/CVREF+/AERXD3/PMA6/RA10
AETXCLK/SCL1/INT3/RA14
AETXEN/SDA1/INT4/RA15
17
38
58
59
60
61
91
92
28
29
66
67
IC2PA
TMS/RA0
TCK/RA1
SCL2/RA2
SDA2/RA3
TDI/RA4
TDO/RA5
TRCLK/RA6
TRD3/RA7
R20
200
R21
200
VREF-/CVREF-/PMA7/RA9
VREF+/CVREF+/PMA6/RA10
SCL1/INT3/RA14
SDA1/INT4/RA15
D3G1
VCC3V3
D4G1
D4G2
D5G1
D5G2
Port B
PGED1/AN0/CN2/RB0
PGEC1/AN1/CN3/RB1
AN2/C2IN-/CN4/RB2
AN3/C2IN+/CN5/RB3
AN4/C1IN-/CN6/RB4
AN5/C1IN+/VBUSON/CN7/RB5
PGEC2/AN6/OCFA/RB6
PGED2/AN7/RB7
AN8/C1OUT/RB8
AN9/C2OUT/RB9
AN10/CVREFOUT/PMA13/RB10
AN11/ERXERR/AETXERR/PMA12/RB11
AN12/ERXD0/AECRS/PMA11/RB12
AN13/ERXD1/AECOL/PMA10/RB13
AN14/ERXD2/AETXD3/PMALH/PMA1/RB14
AN15/ERXD3/AETXD2/
OCFB/PMALL/PMA0/CN12/RB15
25
24
23
22
21
20
26
27
32
33
34
35
41
42
43
44
IC2PB
R22
200
R23
200
R24
200
R25
200
R26
200
R27
200
PGED1/AN0/CN2/RB0
PGEC1/AN1/CN3/RB1
AN2/C2IN-/CN4/RB2
AN3/C2IN+/CN5/RB3
AN4/C1IN-/CN6/RB4
AN5/C1IN+/VBUSON/CN7/RB5
P32_PGC
P32_PGD
R28
200
R29
200
R30
200
R31
200
R32
200
R33
200
R34
200
AN8/C1OUT/RB8
AN9/C2OUT/RB9
AN10/CVREFOUT/PMA13/RB10
AN11/PMA12/RB11
VMON
AN13/PMA10/RB13
AN14/PMALH/PMA1/RB14
AN15/OCFB/PMALL/PMA0/CN12/RB15
D3G2
D6G1
D6G2
VCC3V3
VCC3V3
AN13/PMA10/RB13
R35
1K
VR1
10K
GND
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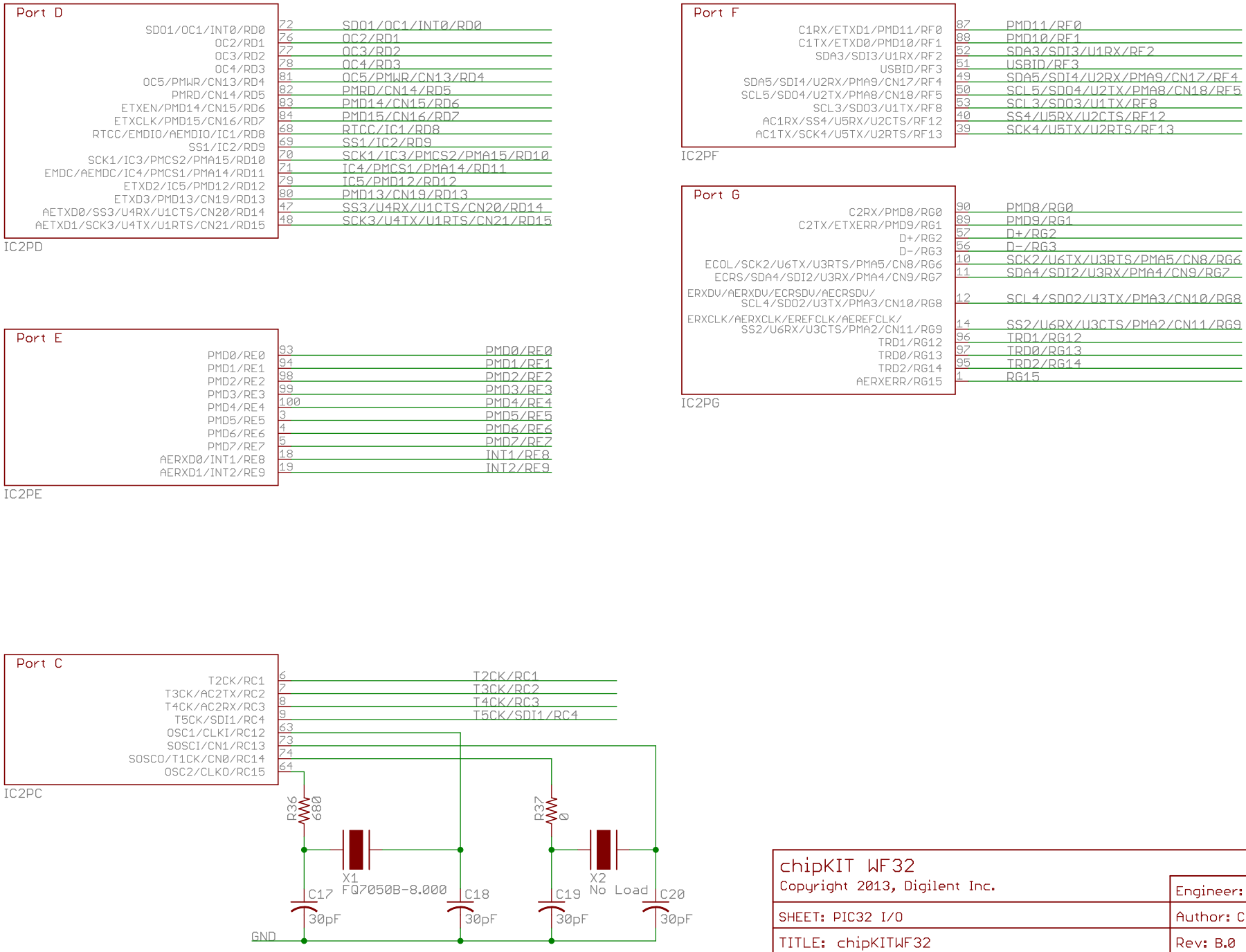
Port D
SDO1/OC1/INT0/RD0
OC2/RD1
OC3/RD2
OC4/RD3
OC5/PMWR/CN13/RD4
PMRD/CN14/RD5
ETXEN/PMD14/CN15/RD6
ETXCLK/PMD15/CN16/RD7
RTCC/EMDIO/AEMDIO/IC1/RD8
SS1/IC2/RD9
SCK1/IC3/PMCS2/PMA15/RD10
EMDC/AEMDC/IC4/PMCS1/PMA14/RD11
ETXD2/IC5/PMD12/RD12
ETXD3/PMD13/CN19/RD13
AETXD0/SS3/U4RX/U1CTS/CN20/RD14
AETXD1/SCK3/U4TX/U1RTS/CN21/RD15
72 SDO1/OC1/INT0/RD0
76 OC2/RD1
77 OC3/RD2
78 OC4/RD3
81 OC5/PMWR/CN13/RD4
82 PMRD/CN14/RD5
83 PMD14/CN15/RD6
84 PMD15/CN16/RD7
68 RTCC/IC1/RD8
69 SS1/IC2/RD9
70 SCK1/IC3/PMCS2/PMA15/RD10
71 IC4/PMCS1/PMA14/RD11
79 IC5/PMD12/RD12
80 PMD13/CN19/RD13
47 SS3/U4RX/U1CTS/CN20/RD14
48 SCK3/U4TX/U1RTS/CN21/RD15
IC2PD
Port F
C1RX/ETXD1/PMD11/RF0
C1TX/ETXD0/PMD10/RF1
SDA3/SDI3/U1RX/RF2
USBID/RF3
SDA5/SDI4/U2RX/PMA9/CN17/RF4
SCL5/SDO4/U2TX/PMA8/CN18/RF5
SCL3/SDO3/U1TX/RF8
AC1RX/SS4/U5RX/U2CTS/RF12
AC1TX/SCK4/U5TX/U2RTS/RF13
87 PMD11/RF0
88 PMD10/RF1
52 SDA3/SDI3/U1RX/RF2
51 USBID/RF3
49 SDA5/SDI4/U2RX/PMA9/CN17/RF4
50 SCL5/SDO4/U2TX/PMA8/CN18/RF5
53 SCL3/SDO3/U1TX/RF8
40 SS4/U5RX/U2CTS/RF12
39 SCK4/U5TX/U2RTS/RF13
IC2PF
Port G
C2RX/PMD8/RG0
C2TX/ETXERR/PMD9/RG1
D+/RG2
D-/RG3
ECOL/SCK2/U6TX/U3RTS/PMA5/CN8/RG6
ECRS/SDA4/SDI2/U3RX/PMA4/CN9/RG7
ERXDV/AERXDV/ECRSDV/AECRSDV/
SCL4/SDO2/U3TX/PMA3/CN10/RG8
ERXCLK/AERXCLK/EREFCLK/AEREFCLK/
SS2/U6RX/U3CTS/PMA2/CN11/RG9
TRD1/RG12
TRD0/RG13
TRD2/RG14
AERXERR/RG15
90 PMD8/RG0
89 PMD9/RG1
57 D+/RG2
56 D-/RG3
10 SCK2/U6TX/U3RTS/PMA5/CN8/RG6
11 SDA4/SDI2/U3RX/PMA4/CN9/RG7
12 SCL4/SDO2/U3TX/PMA3/CN10/RG8
14 SS2/U6RX/U3CTS/PMA2/CN11/RG9
96 TRD1/RG12
97 TRD0/RG13
95 TRD2/RG14
1 RG15
IC2PG
Port E
PMD0/RE0
PMD1/RE1
PMD2/RE2
PMD3/RE3
PMD4/RE4
PMD5/RE5
PMD6/RE6
PMD7/RE7
AERXD0/INT1/RE8
AERXD1/INT2/RE9
93 PMD0/RE0
94 PMD1/RE1
98 PMD2/RE2
99 PMD3/RE3
100 PMD4/RE4
3 PMD5/RE5
4 PMD6/RE6
5 PMD7/RE7
18 INT1/RE8
19 INT2/RE9
IC2PE
Port C
T2CK/RC1
T3CK/AC2TX/RC2
T4CK/AC2RX/RC3
T5CK/SDI1/RC4
OSC1/CLKI/RC12
SOSCI/CN1/RC13
SOSCO/T1CK/CN0/RC14
OSC2/CLKO/RC15
6 T2CK/RC1
7 T3CK/RC2
8 T4CK/RC3
9 T5CK/SDI1/RC4
63
73
74
64
IC2PC
R36
680
R37
0
X1
FQ7050B-8.000
X2
No Load
C17
30pF
C18
30pF
C19
30pF
C20
30pF
GND
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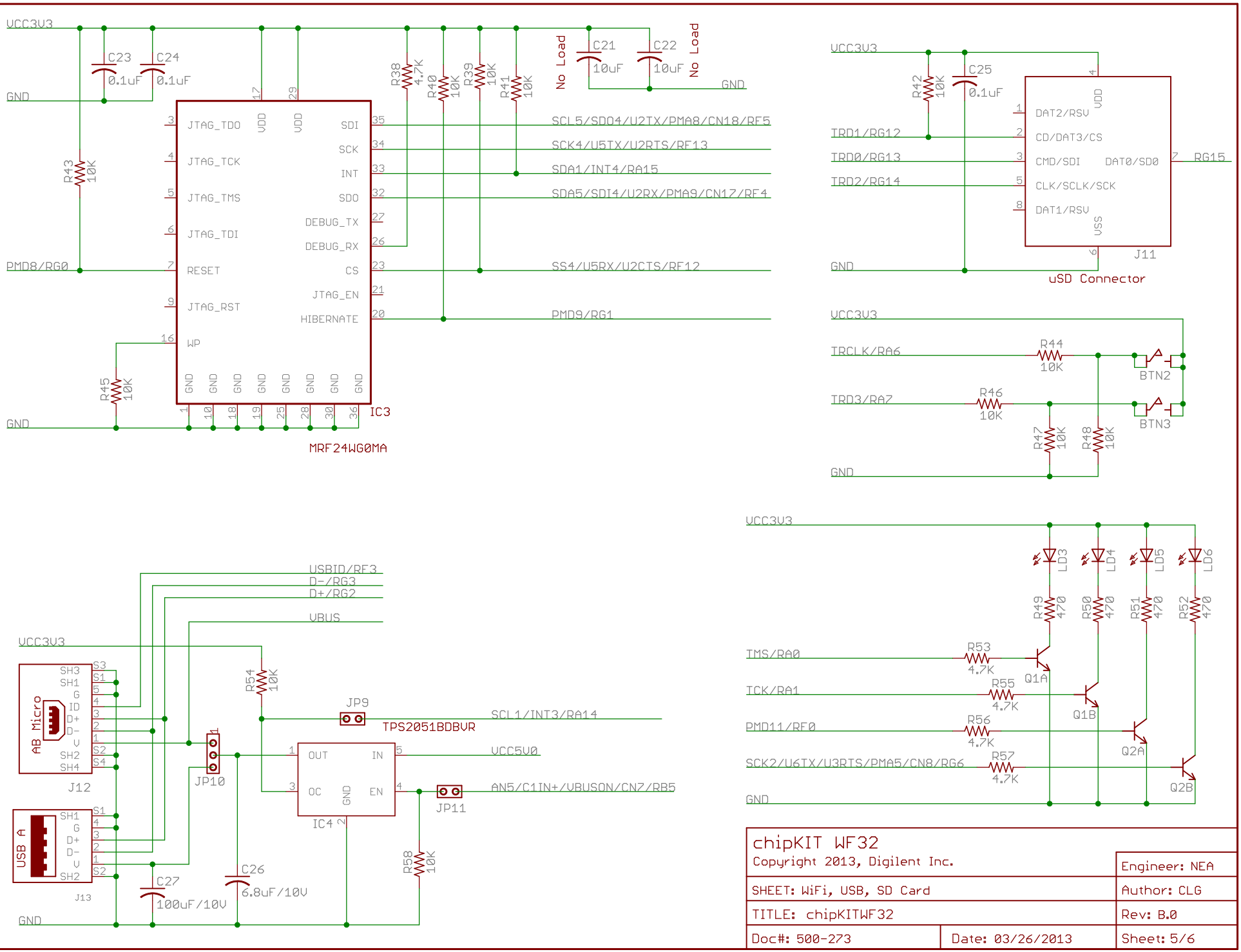
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C23
0.1uF
C24
0.1uF
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R43
10K
PMD8/RG0
R45
10K
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JTAG_TDO
JTAG_TCK
JTAG_TMS
JTAG_TDI
RESET
JTAG_RST
WP
VDD
VDD
SDI
SCK
INT
SDO
DEBUG_TX
DEBUG_RX
CS
JTAG_EN
HIBERNATE
GND
IC3
MRF24WG0MA
R38
4.7K
R40
10K
R39
10K
R41
10K
No Load
C21
10uF
C22
10uF
No Load
GND
SCL5/SDO4/U2TX/PMA8/CN18/RF5
SCK4/U5TX/U2RTS/RF13
SDA1/INT4/RA15
SDA5/SDI4/U2RX/PMA9/CN17/RF4
SS4/U5RX/U2CTS/RF12
PMD9/RG1
VCC3V3
R42
10K
C25
0.1uF
IRD1/RG12
IRD0/RG13
IRD2/RG14
DAT2/RSV
CD/DAT3/CS
CMD/SDI
CLK/SCLK/SCK
DAT1/RSV
VDD
DAT0/SD0
VSS
RG15
J11
GND
uSD Connector
VCC3V3
IRCLK/RA6
R44
10K
BTN2
IRD3/RA7
R46
10K
BTN3
R47
10K
R48
10K
GND
USBID/RF3
D-/RG3
D+/RG2
VBUS
VCC3V3
AB Micro
SH3
SH1
G
ID
D+
D-
V
SH2
SH4
J12
R54
10K
JP9
SCL1/INT3/RA14
TPS2051BDBVR
JP10
OUT
IN
OC
GND
EN
IC4
VCC5V0
JP11
AN5/C1IN+/VBUSON/CN7/RB5
R58
10K
USB A
SH1
G
D+
D-
V
SH2
J13
C27
100uF/10V
C26
6.8uF/10V
GND
VCC3V3
LD3
LD4
LD5
LD6
R49
470
R50
470
R51
470
R52
470
TMS/RA0
R53
4.7K
Q1A
TCK/RA1
R55
4.7K
Q1B
PMD11/RF0
R56
4.7K
Q2A
SCK2/U6TX/U3RTS/PMA5/CN8/RG6
R57
4.7K
Q2B
GND
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SHEET: WiFi, USB, SD Card
Author: CLG
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Date: 03/26/2013
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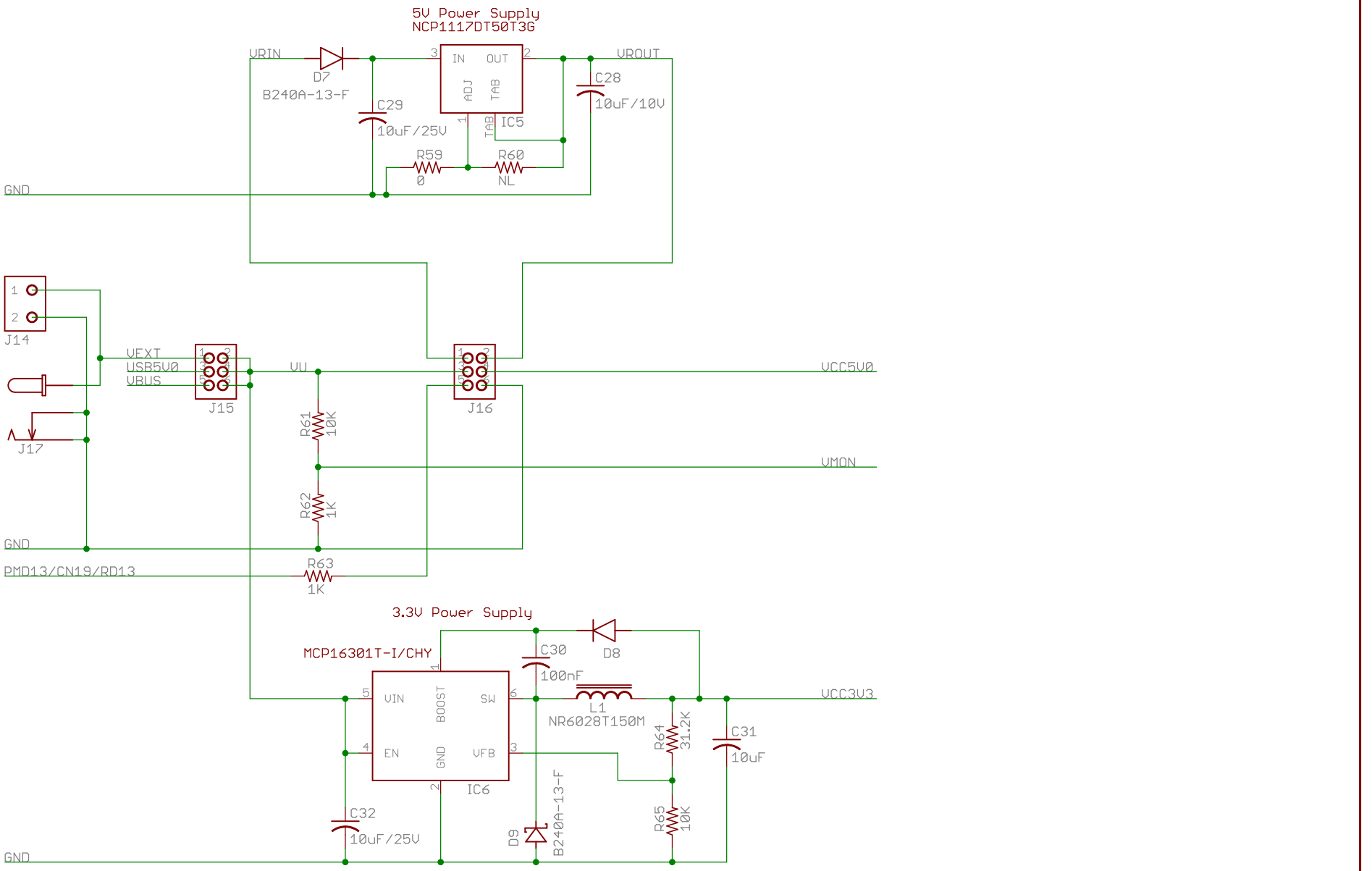

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SHEET: Power Supplies		Author: CLG
TITLE: chipKITWF32		Rev: B.0
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