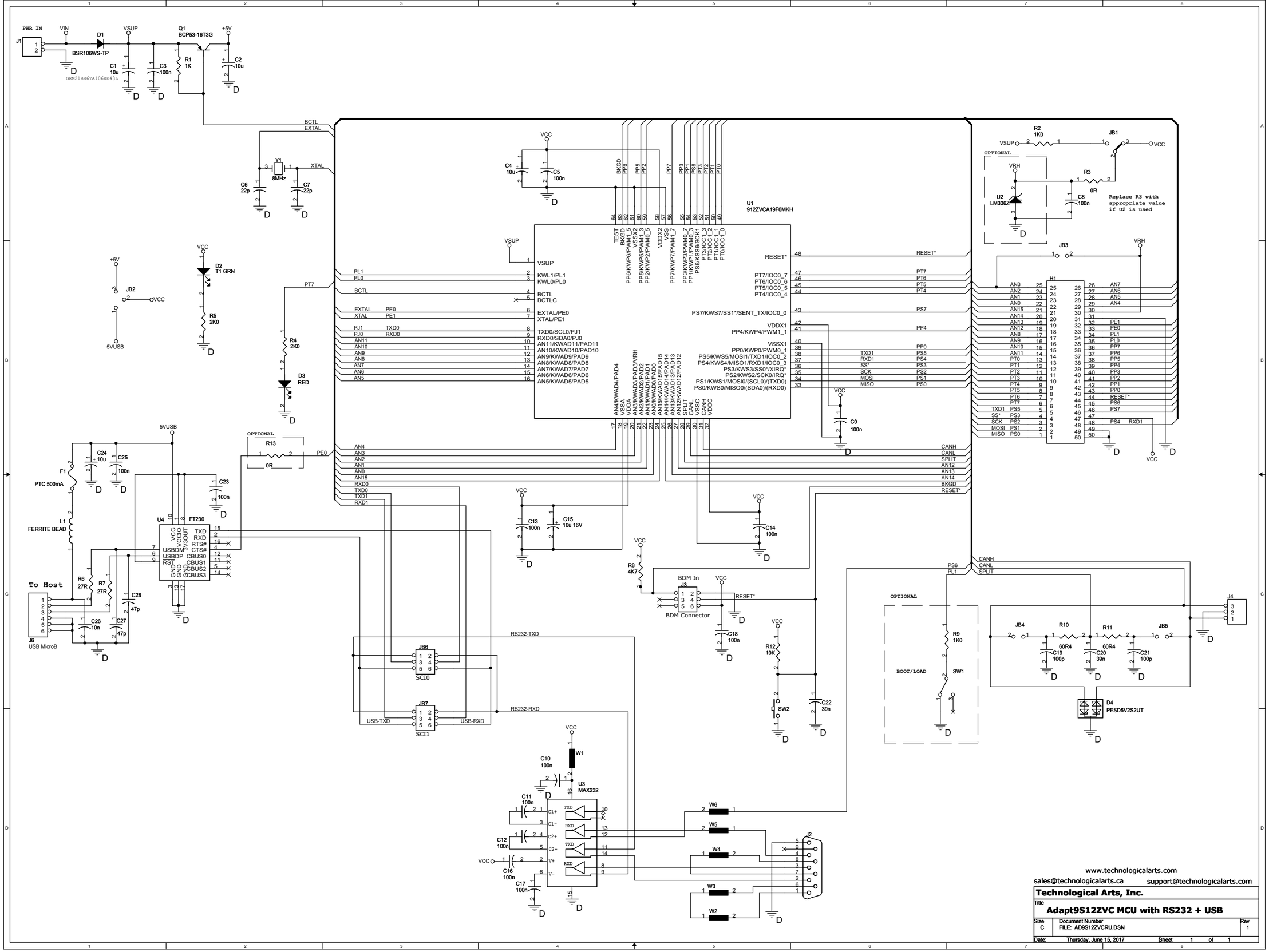
PWR IN
J1
VIN
D1
BSR106WS-TP
VSUP
C1 10u
GRM21BR6YA106KE43L
C3 100n
Q1 BCP53-16T3G
R1 1K
+5V
C2 10u
BCTL
EXTAL
XTAL
Y1 8MHz
C6 22p
C7 22p
VCC
C4 10u
C5 100n
U1 912ZVCA19F0MKH
VSUP
KWL1/PL1
KWL0/PL0
BCTL
BCTLC
EXTAL/PE0
XTAL/PE1
TXD0/SCL0/PJ1
RXD0/SDA0/PJ0
AN11/KWAD11/PAD11
AN10/KWAD10/PAD10
AN9/KWAD9/PAD9
AN8/KWAD8/PAD8
AN7/KWAD7/PAD7
AN6/KWAD6/PAD6
AN5/KWAD5/PAD5
AN4/KWAD4/PAD4
RESET*
PT7/IOC0_7
PT6/IOC0_6
PT5/IOC0_5
PT4/IOC0_4
PS7/KWS7/SS1*/SENT_TX/IOC0_0
VDDX1
PP4/KWP4/PWM1_1
VSSX1
PP0/KWP0/PWM0_1
PS5/KWS5/MOSI1/TXD1/IOC0_2
PS4/KWS4/MISO1/RXD1/IOC0_3
PS3/KWS3/SS0*/XIRQ*
PS2/KWS2/SCK0/IRQ*
PS1/KWS1/MOSI0/(SCL0)/(TXD0)
PS0/KWS0/MISO0/(SDA0)/(RXD0)
CANH
CANL
SPLIT
AN12
AN13
AN14
BKGD
RESET*
C9 100n
C14 100n
C13 100n
C15 10u 16V
R2 1K0
JB1
OPTIONAL
VRH
U2 LM336Z
R3 0R
C8 100n
Replace R3 with appropriate value if U2 is used
JB3
H1
+5V
JB2
5VUSB
D2 T1 GRN
R5 2K0
PT7
R4 2K0
D3 RED
OPTIONAL
R13 0R
PE0
5VUSB
F1 PTC 500mA
C24 10u
C25 100n
C23 100n
L1 FERRITE BEAD
U4 FT230
VCC
VCCIO
3V3OUT
USBDM
USBDP
RST
GND
TXD
RXD
RTS#
CTS#
CBUS0
CBUS1
CBUS2
CBUS3
To Host
J6 USB MicroB
R6 27R
R7 27R
C26 10n
C27 47p
C28 47p
R8 4K7
BDM In
J3
BDM Connector
RESET*
C18 100n
R12 10K
SW2
C22 39n
OPTIONAL
R9 1K0
BOOT/LOAD
SW1
PS6
PL1
J4
JB4
R10 60R4
C19 100p
R11 60R4
C20 39n
C21 100p
JB5
D4 PESD5V2S2UT
RS232-TXD
RS232-RXD
JB6
SCI0
JB7
SCI1
USB-TXD
USB-RXD
W1
C10 100n
U3 MAX232
C11 100n
C12 100n
C16 100n
C17 100n
W6
W5
W4
W3
W2
J2
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Title
Adapt9S12ZVC MCU with RS232 + USB
Size C
Document Number
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Rev 1
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Sheet 1 of 1