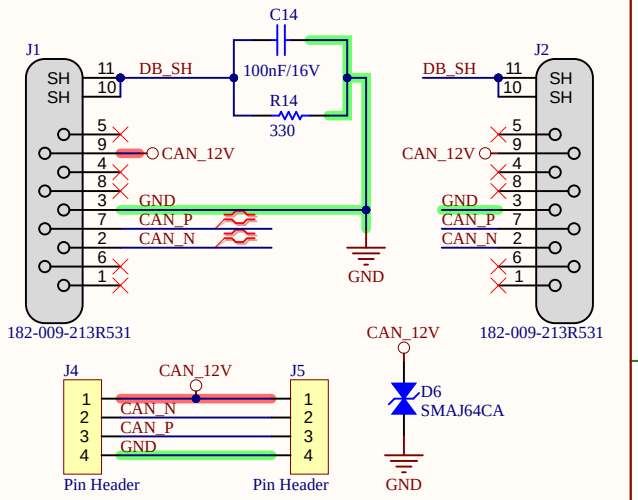
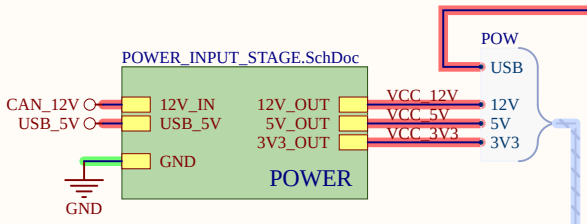
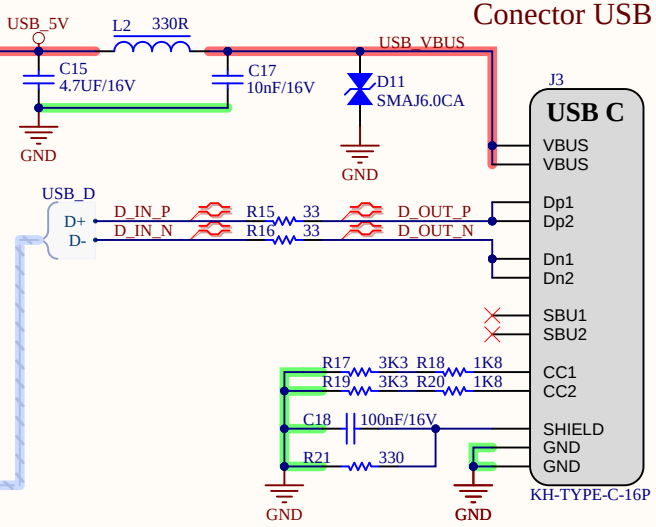
Conector bus CAN



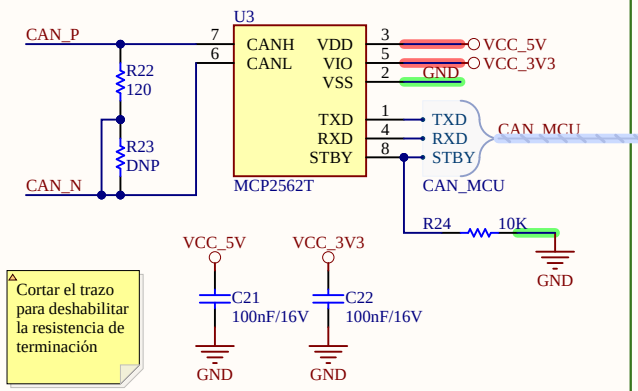
Protección y regulación de la alimentación



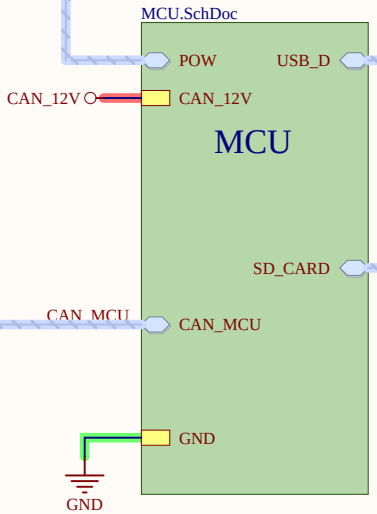
Conector USB



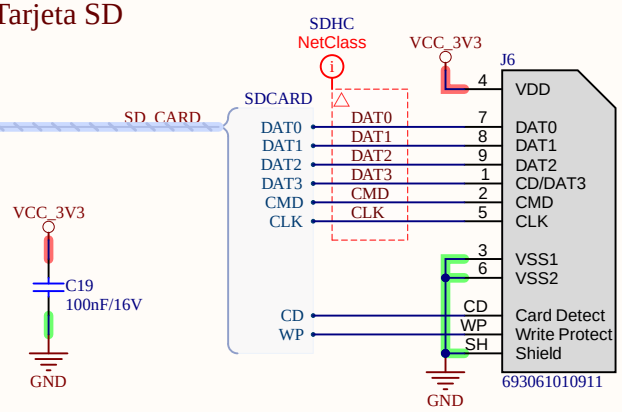
Transceiver CAN



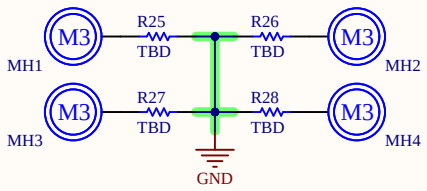
Microcontrolador



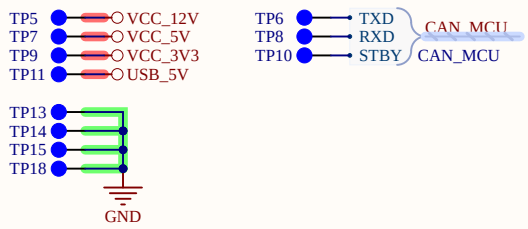
Tarjeta SD



Montaje

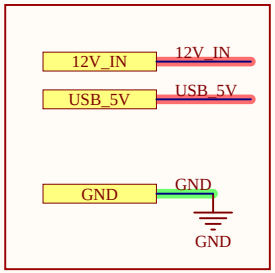


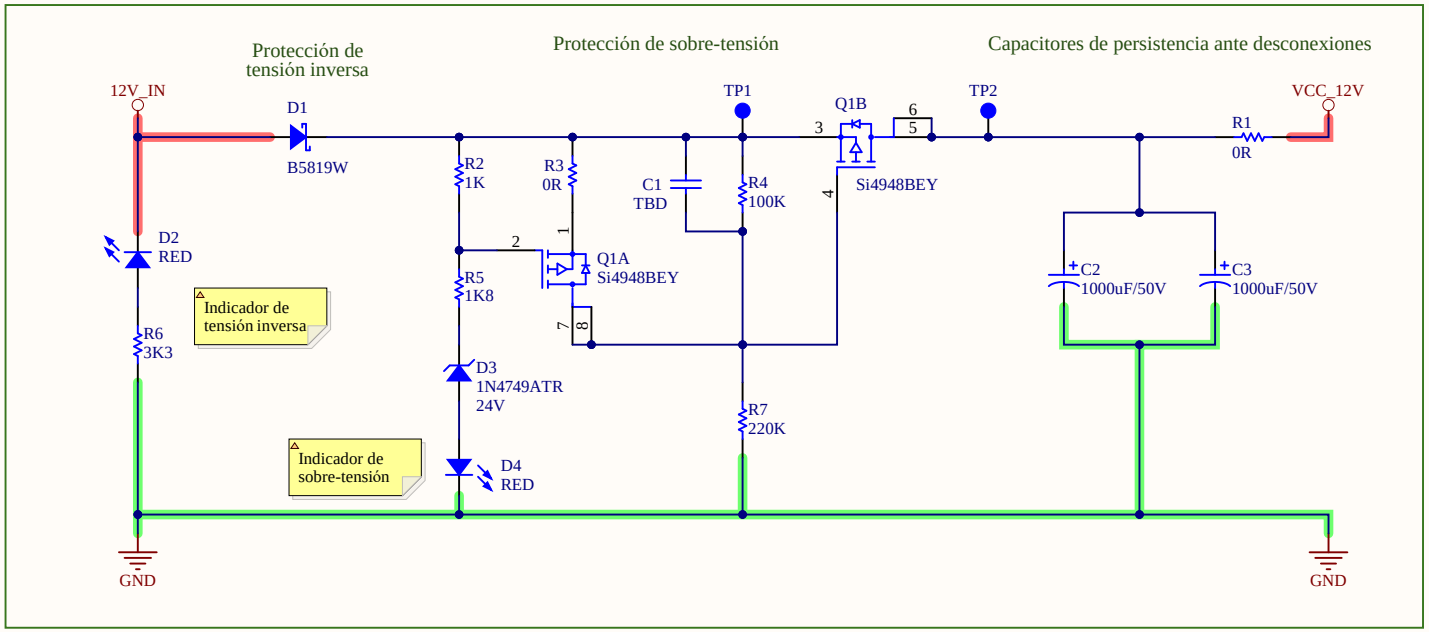
Puntos de prueba

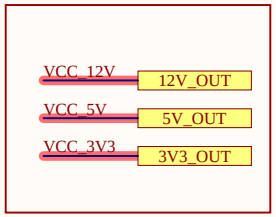


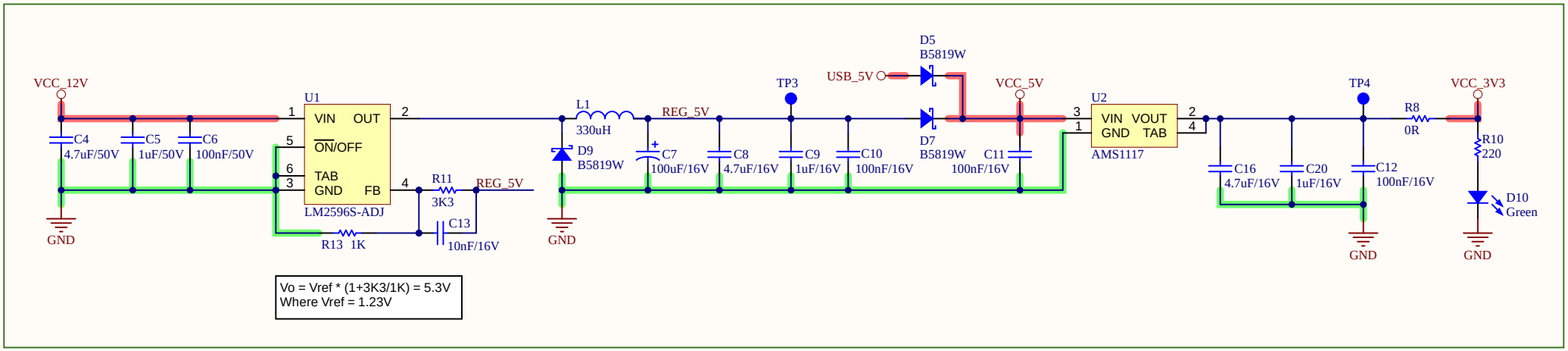
Title: CAN Data Logger Board			
Number: CANDLE-01	Project Revision: 01	Variant Name: MC	Variant Revision: 01
Authors: M Bergerman, X Lin, P Smolkin, M L Stewart			Size: A2
File Name: CANDLE-01.SchDoc		Sheet 1 of 3	

Power Input Stage

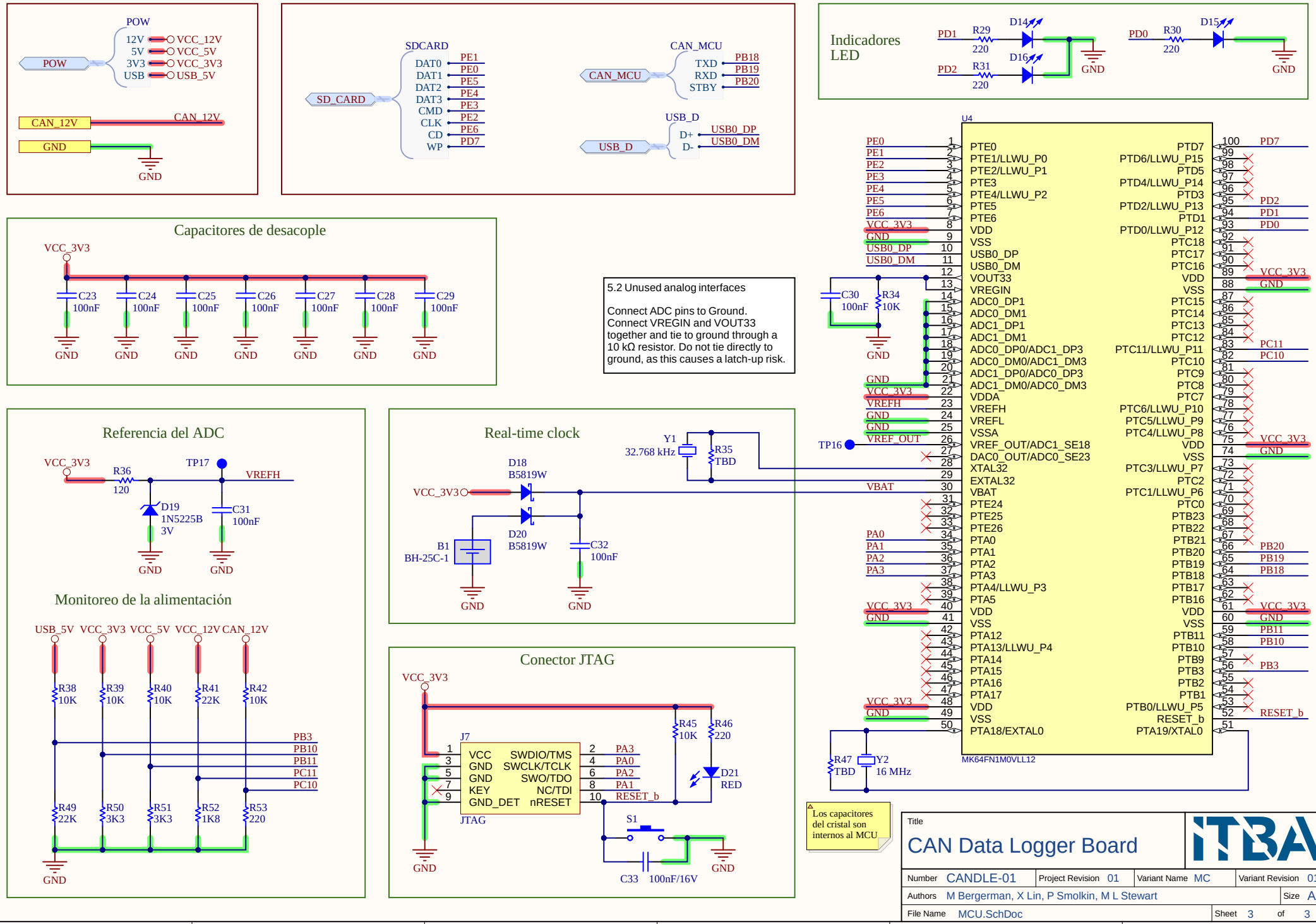








Title: CAN Data Logger Board			
Number: CANDLE-01	Project Revision: 01	Variant Name: MC	Variant Revision: 01
Authors: M Bergerman, X Lin, P Smolkin, M L Stewart			Size: A2
File Name: POWER_INPUT_STAGE.SchDoc		Sheet: 2 of 3	


POW
12V
5V
3V3
USB
VCC_12V
VCC_5V
VCC_3V3
USB_5V
CAN_12V
GND
SDCARD
SD_CARD
DAT0
DAT1
DAT2
DAT3
CMD
CLK
CD
WP
PE1
PE0
PE5
PE4
PE3
PE2
PE6
PD7
CAN_MCU
TXD
RXD
STBY
PB18
PB19
PB20
USB_D
D+
D-
USB0_DP
USB0_DM
Indicadores LED
PD1
R29
220
D14
D16
PD2
R31
PD0
R30
D15
Capacitores de desacople
C23 100nF
C24 100nF
C25 100nF
C26 100nF
C27 100nF
C28 100nF
C29 100nF
5.2 Unused analog interfaces
Connect ADC pins to Ground. Connect VREGIN and VOUT33 together and tie to ground through a 10 kΩ resistor. Do not tie directly to ground, as this causes a latch-up risk.
Referencia del ADC
R36
120
TP17
VREFH
D19
1N5225B
3V
C31
100nF
Monitoreo de la alimentación
R38 10K
R39 10K
R40 10K
R41 22K
R42 10K
R49 22K
R50 3K3
R51 3K3
R52 1K8
R53 220
Real-time clock
Y1
32.768 kHz
R35
TBD
D18
B5819W
D20
B5819W
B1
BH-25C-1
C32
100nF
Conector JTAG
J7
VCC
GND
GND
KEY
GND_DET
SWDIO/TMS
SWCLK/TCLK
SWO/TDO
NC/TDI
nRESET
JTAG
R45 10K
R46 220
D21
RED
S1
C33 100nF/16V
U4
PTE0
PTE1/LLWU_P0
PTE2/LLWU_P1
PTE3
PTE4/LLWU_P2
PTE5
PTE6
VDD
VSS
USB0_DP
USB0_DM
VOUT33
VREGIN
ADC0_DP1
ADC0_DM1
ADC1_DP1
ADC1_DM1
ADC0_DP0/ADC1_DP3
ADC0_DM0/ADC1_DM3
ADC1_DP0/ADC0_DP3
ADC1_DM0/ADC0_DM3
VDDA
VREFH
VREFL
VSSA
VREF_OUT/ADC1_SE18
DAC0_OUT/ADC0_SE23
XTAL32
EXTAL32
VBAT
PTE24
PTE25
PTE26
PTA0
PTA1
PTA2
PTA3
PTA4/LLWU_P3
PTA5
VDD
VSS
PTA12
PTA13/LLWU_P4
PTA14
PTA15
PTA16
PTA17
VDD
VSS
PTA18/EXTAL0
PTD7
PTD6/LLWU_P15
PTD5
PTD4/LLWU_P14
PTD3
PTD2/LLWU_P13
PTD1
PTD0/LLWU_P12
PTC18
PTC17
PTC16
VDD
VSS
PTC15
PTC14
PTC13
PTC12
PTC11/LLWU_P11
PTC10
PTC9
PTC8
PTC7
PTC6/LLWU_P10
PTC5/LLWU_P9
PTC4/LLWU_P8
VDD
VSS
PTC3/LLWU_P7
PTC2
PTC1/LLWU_P6
PTC0
PTB23
PTB22
PTB21
PTB20
PTB19
PTB18
PTB17
PTB16
VDD
VSS
PTB11
PTB10
PTB9
PTB3
PTB2
PTB1
PTB0/LLWU_P5
RESET_b
PTA19/XTAL0
MK64FN1M0VLL12
C30 100nF
R34 10K
TP16
R47 TBD
Y2 16 MHz
Los capacitores del cristal son internos al MCU
Title
CAN Data Logger Board
ITBA
Number CANDLE-01
Project Revision 01
Variant Name MC
Variant Revision 01
Authors M Bergerman, X Lin, P Smolkin, M L Stewart
Size A2
File Name MCU.SchDoc
Sheet 3 of 3