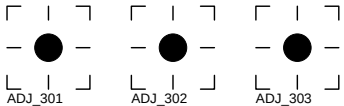
XMC1400 Boot Kit
CPU Card - VQFN64

CPU-14A-V1.1

[1] Contents
[2] XMC1404, Connector, CAN Interface
[3] On-Board XMC4200 DEBUG & COM

Fiducials

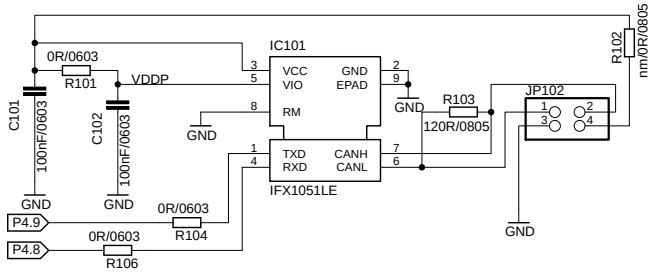


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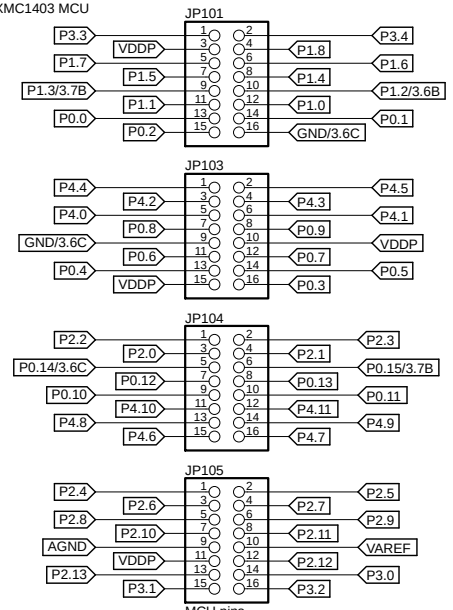
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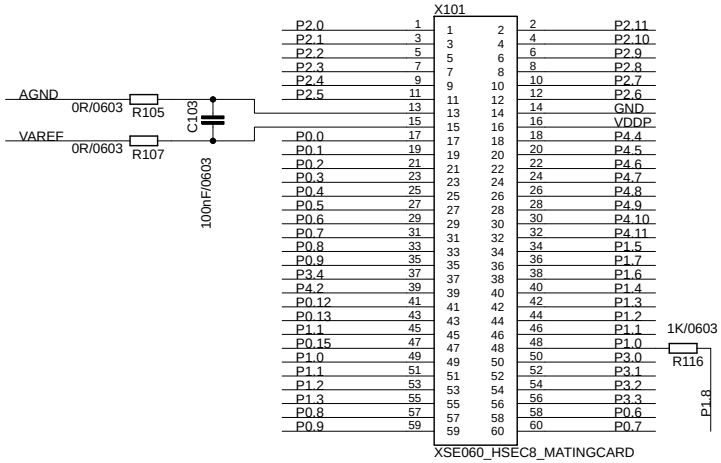
CAN transceiver (work for 5V only)



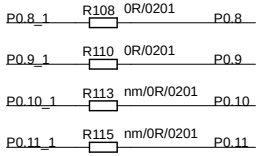
XMC1403 MCU



60pin edge connector

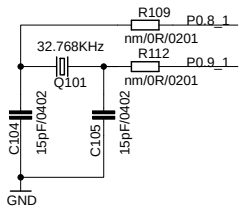


Jumpers to connect P0.8,P0.9,P0.10,P0.11 to Header

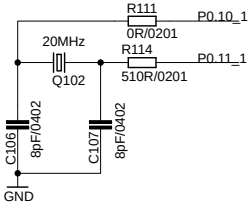


Note: nm means 'not mounted'

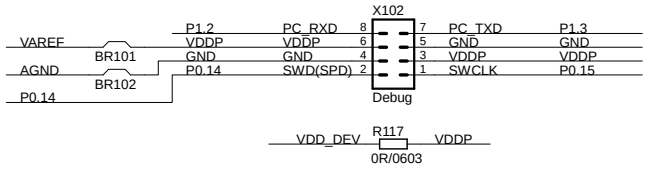
External RTC



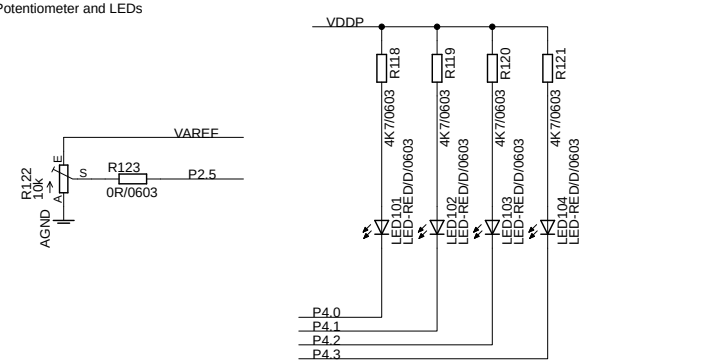
External XTAL



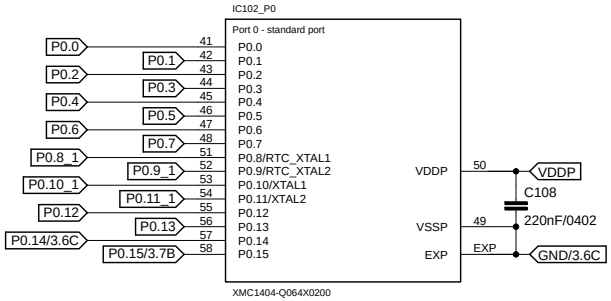
Debug Connector SWD, SPD, UART



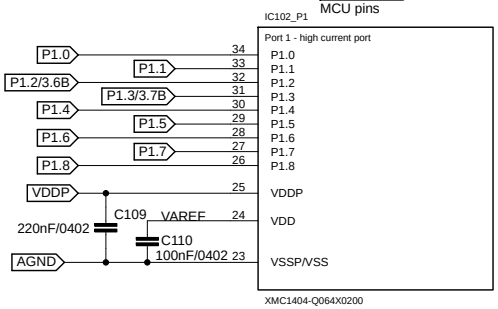
Potentiometer and LEDs



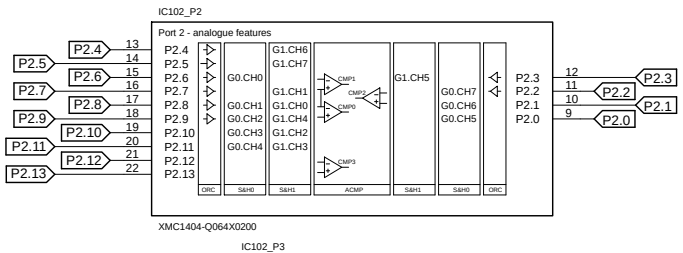
IC102_P0



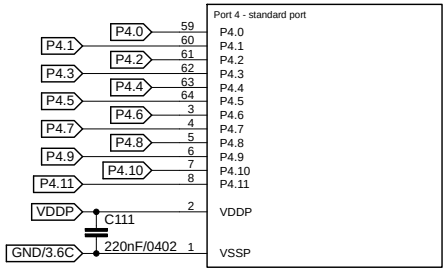
IC102_P1



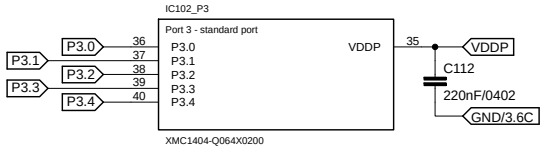
IC102_P2



IC102_P4



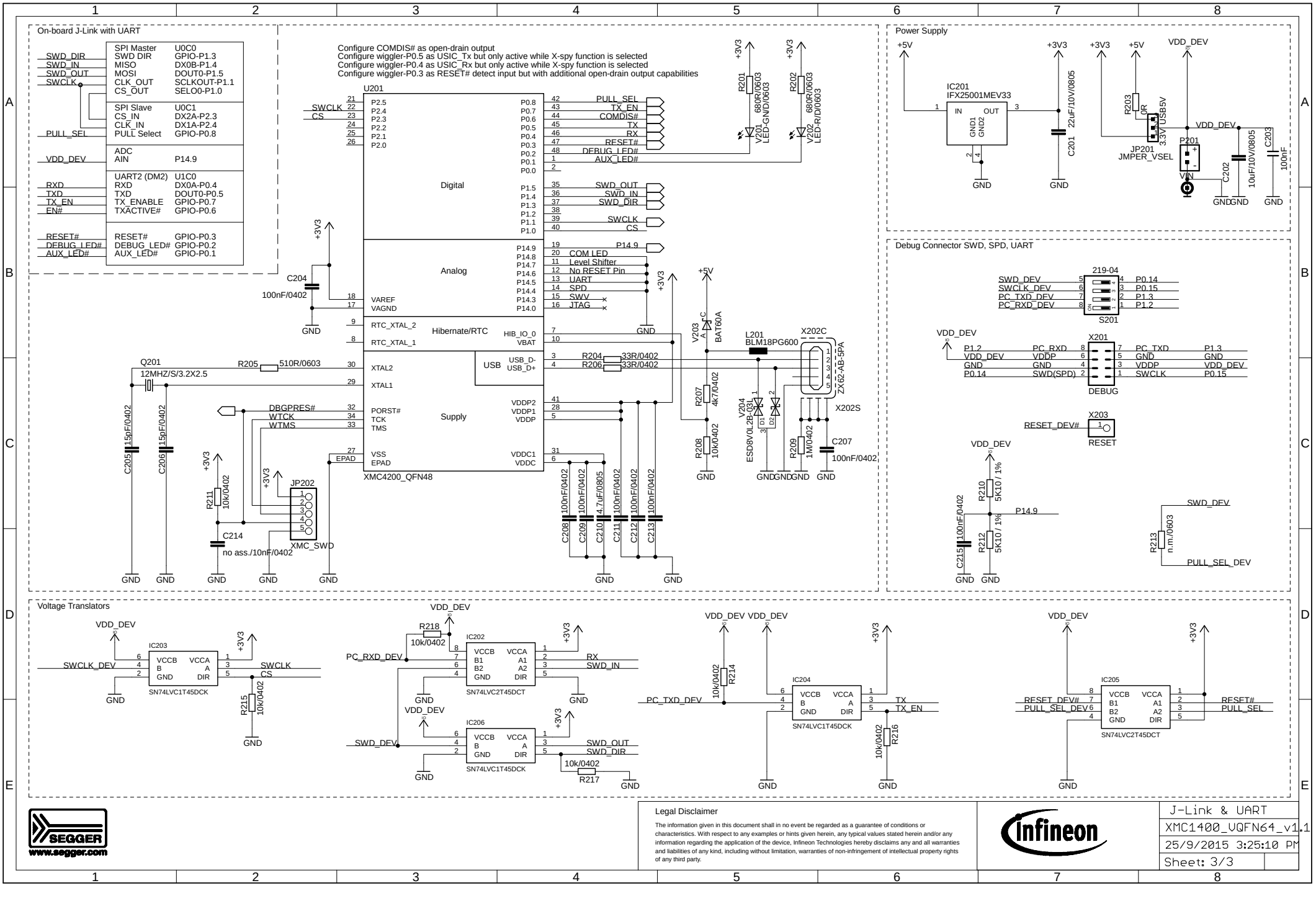
IC102_P3



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MCU	
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On-board J-Link with UART
SWD_DIR
SWD_IN
SWD_OUT
SWCLK
PULL_SEL
VDD_DEV
RXD
TXD
TX_EN
EN#
RESET#
DEBUG_LED#
AUX_LED#
SPI Master U0C0
SWD DIR GPIO-P1.3
MISO DX0B-P1.4
MOSI DOUT0-P1.5
CLK_OUT SCLKOUT-P1.1
CS_OUT SELO0-P1.0
SPI Slave U0C1
CS_IN DX2A-P2.3
CLK_IN DX1A-P2.4
PULL Select GPIO-P0.8
ADC
AIN P14.9
UART2 (DM2) U1C0
RXD DX0A-P0.4
TXD DOUT0-P0.5
TX_ENABLE GPIO-P0.7
TXACTIVE# GPIO-P0.6
RESET# GPIO-P0.3
DEBUG_LED# GPIO-P0.2
AUX_LED# GPIO-P0.1
Configure COMDIS# as open-drain output
Configure wiggler-P0.5 as USIC_Tx but only active while X-spy function is selected
Configure wiggler-P0.4 as USIC_Rx but only active while X-spy function is selected
Configure wiggler-P0.3 as RESET# detect input but with additional open-drain output capabilities
U201
Digital
Analog
Hibernate/RTC
USB
Supply
XMC4200_QFN48
PULL_SEL
TX_EN
COMDIS#
TX
RX
RESET#
DEBUG_LED#
AUX_LED#
SWD_OUT
SWD_IN
SWD_DIR
SWCLK
CS
P14.9
COM LED
Level Shifter
No RESET Pin
UART
SPD
SWV
JTAG
R201 680R/0603 V201 LED-GND/0603
R202 680R/0603 V202 LED-R/D/0603
C204 100nF/0402
Q201 12MHZ/S/3.2X2.5
R205 510R/0603
R204 33R/0402
R206 33R/0402
V203 BAT60A
L201 BLM18PG600
X202C ZX62-AB-5PA
X202S
V204 ESD8V0L2B-03L
R207 4k7/0402
R208 10k/0402
R209 1M/0402
C207 100nF/0402
C205 15pF/0402
C206 15pF/0402
R211 10k/0402
C214 no ass./10nF/0402
JP202 XMC_SWD
DBGPRES#
WTCK
WTMS
C208 100nF/0402
C209 100nF/0402
C210 4.7uF/0805
C211 100nF/0402
C212 100nF/0402
C213 100nF/0402
Power Supply
IC201 IFX25001MEV33
C201 22uF/10V/0805
R203 0R
JP201 JMPER_VSEL
P201 VIN
C202 10uF/10V/0805
C203 100nF
Debug Connector SWD, SPD, UART
219-04 S201
SWD_DEV
SWCLK_DEV
PC_TXD_DEV
PC_RXD_DEV
P0.14
P0.15
P1.3
P1.2
X201 DEBUG
X203 RESET
RESET_DEV#
R210 5K10 / 1%
R212 5K10 / 1%
C215 100nF/0402
R213 n.m./0603
PULL_SEL_DEV
Voltage Translators
IC203 SN74LVC1T45DCK
SWCLK_DEV
R215 10k/0402
IC202 SN74LVC2T45DCT
R218 10k/0402
PC_RXD_DEV
IC206 SN74LVC1T45DCK
SWD_DEV
R217 10k/0402
IC204 SN74LVC1T45DCK
PC_TXD_DEV
R214 10k/0402
R216 10k/0402
IC205 SN74LVC2T45DCT
RESET_DEV#
PULL_SEL_DEV
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