

BoosterPack Connectors

RC Filter for DAC Output removed

Pin Selection for J1.pin3

VSENV

PA25_A0_2
PA9_UART1_RX
PA8_UART1-TX
PA26_GPIO
PA14_A0_12
PB3_SPI0_CLK
PA27_GPIO
PA1_I2C0_SCL
PA0_I2C0_SDA

nFAULT

J13

+3.3V
Analog_In
LP_UART_RX
LP_UART_TX
GPIO !
Analog_In
SPI_CLK
GPIO !
I2C_SCL
I2C_SDA

SSQ-110-03-T-D

left side of booster

+5V

+5V
GND
Analog_In
Analog_In
Analog_In
Analog_In/I2S_WS
Analog_In/I2S_SCLK
Analog_Out/I2S_SDOut
Analog_Out/I2S_SDIn

21

22

23

24

25

26

27

28

29

30

PA16_A0_13

GND

J15

3

2

1

Motor Phase Voltage

Motor Phase Current

1/2/3 ISEN algorithm

Pin Selection for J3.pin29

J15 is to flexibly adopt 1 ISEN algorithm, 2 ISENs algorithm and 3 ISENs algorithm
Some DRV BP the ISENA/B/C is 26 27 28, some is 27 28 29

Text

J16

PB8_TIMA0_C0
PB9_TIMA0_CON
PB20_TIMA0-C2
PA6_TIMA0-C2N
PA28_TIMA0_C3
PA31_TIMA0_C3N
PA10_UART0-TX_BP
PA11_UART0-RX_BP
PB16
PB18

6*PWM

SSQ-110-03-T-D

GND
PWM/GPIO !
PWM/GPIO !
GPIO !
GPIO
RST
SPI_MOSI
SPI_MISO
SPI_CS/GPIO !
SPI_CS/GPIO !
GPIO !

20

19

18

17

16

15

14

13

12

11

PA7

PB14_SPI0_CS3_TIMG8_IDX

PB24

RST

PB2_SPI0_PICO

PA13_SPI0_POCI

PB6_SPI0-CS1

PB7_SPI0_CS2

PB17

HALL-A or SPI

HALL-B or SPI

SPI

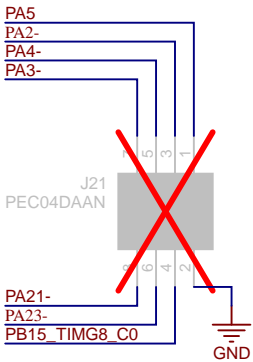
SPI

HALL-C or SPI

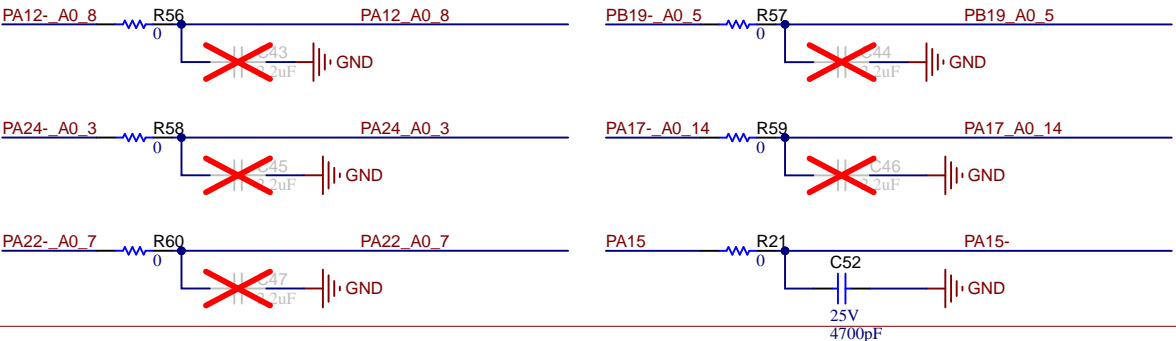
SPI

Pin headers at the Low Side of the Board

PA19, PA20 are SWDIO, SWDCLK for debug/programming interface. They are on J101.pin14, pin16

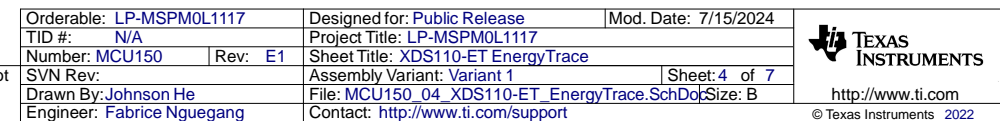


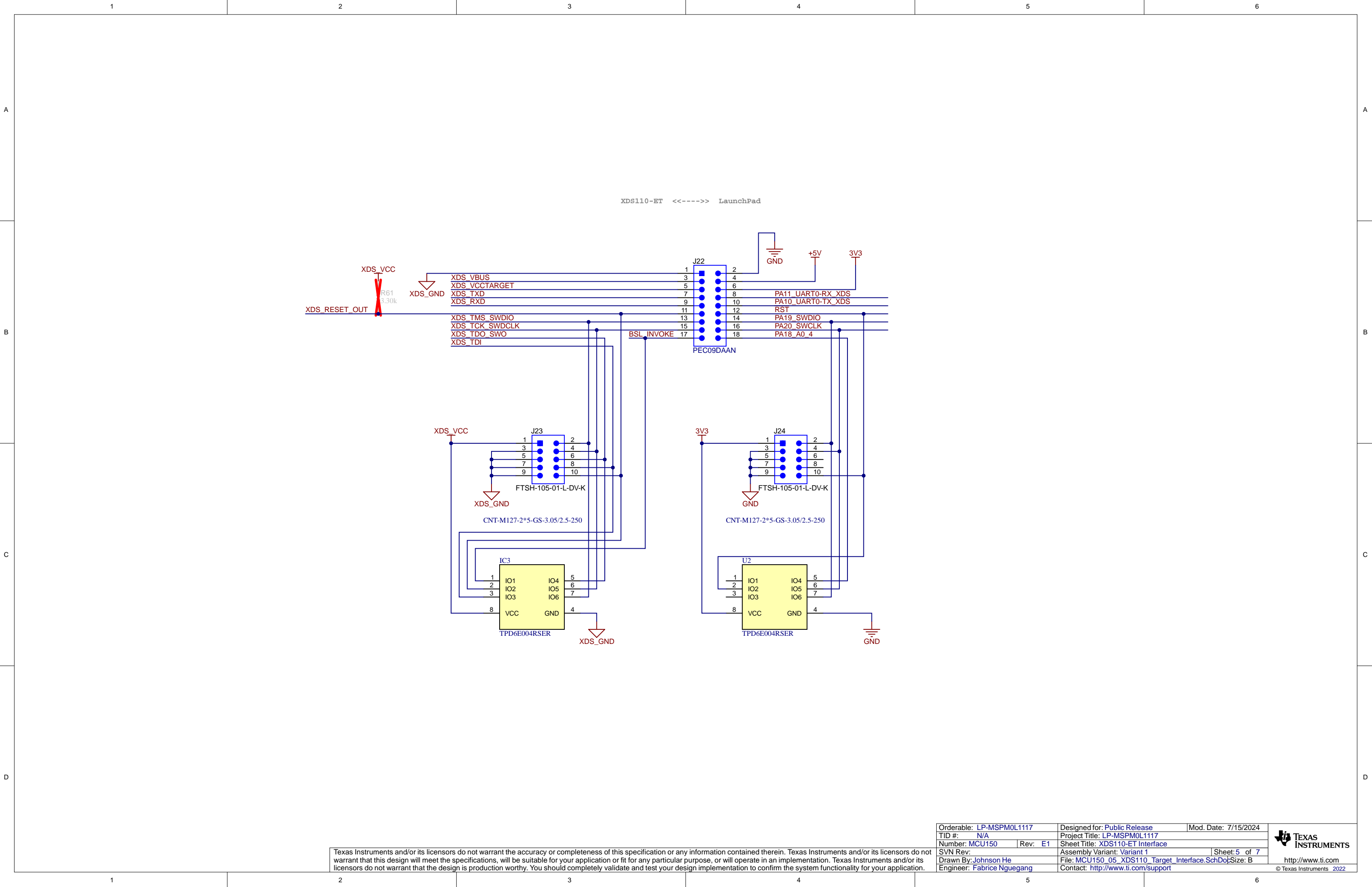
RC Filter for ADC Input



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|----------------------------|---|-------------------------------------|
| Orderable: LP-MSPM0L1117 | Designed for: Public Release | Mod. Date: 7/15/2024 |
| TID #: N/A | Project Title: LP-MSPM0L1117 | |
| Number: MCU150 | Rev: E1 | Sheet Title: BoosterPack Connectors |
| SVN Rev: | Assembly Variant: Variant 1 | Sheet: 2 of 7 |
| Drawn By: Johnson He | File: MCU150_02_BoosterPack_Connectors.SchDoc | Size: B |
| Engineer: Fabrice Nguegang | Contact: http://www.ti.com/support | |

Energy measurement method protected under U.S. Patent Application 13/329,073 and subsequent patent applications





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| TID #: N/A | | Project Title: LP-MSPM0L1117 | |
| Number: MCU150 | Rev: E1 | Sheet Title: XDS110-ET Interface | |
| SVN Rev: | | Assembly Variant: Variant 1 | Sheet: 5 of 7 |
| Drawn By: Johnson He | | File: MCU150_05_XDS110_Target_Interface.SchDoc | |
| Engineer: Fabrice Nguegang | | Contact: http://www.ti.com/support | |

