MICROCHIP

MVCC_33

C2 C3
10uF 0805
0.1uF 0402

L1 10uH GNR3015
C1 10uF 0805

C4 0.1uF 0402

MVCC_33
R1 47K 0402

R2 49.9 0402
RSTn_M

MVCC_33

JP1

BEAD 0402
FB1

BEAD 0402 MVCC_33
FB2

VBAT
C5 2.2uF 0402

C6 C7
10uF 0805
0.1uF 0402

GPIO17_M
SWD_DAT_M
SWD_CLK_M

RSTn_M
RESETn_M
CSn_3_M
CSn_4_M

MVCC_33
C8 C9
2.2uF 0402
0.1uF 0402

U1
SAML21G18B-AUT

PB03 48
PB02 47
PA31 46
PA30 45
VDDIN 44
VSW 43
GND 42
VDDCORE 41
/RESET 40
PA27 39
PB23 38
PB22 37

PA00 1  PA00
PA01 2  PA01    VDDIO 36
ADC_1_MM 3 PA02   GND 35
ADC_2_MM 4 PA03   PA25 34
5 GNDANA          PA24 33  USB_DP_M
6 VDDANA          PA23 32  USB_DM_M
ADC_3_MM 7 PB08   PA22 31  UART_2_RxD_M
GPIO9_M 8 PB09     PA21 30  UART_2_TxD_M
GPIO1_M 9 PA04     PA20 29  LED_OUT_M    SPI_SSn_M
GPIO2_M 10 PA05    PA19 28  SPI_MISO_M
GPIO3_M 11 PA06    PA18 27  CSn_1_M
GPIO4_M 12 PA07    PA17 26  CSn_2_M
                   PA16 25  SPI_SCLK_M
                            SPI_MOSI_M

MVCC_33
C10 C11
2.2uF 0402
0.1uF 0402

PA08 13
PA09 14
PA10 15
PA11 16
VDDIO 17
GND 18
PB10 19
PB11 20
PA12 21
PA13 22
PA14 23
PA15 24

JP1 DF40C-40DP-0.4V(51)
VDD 1       RESETn 2
PORn 3      GPIO_1 4      GPIO1_M
GPIO_2 5    GPIO_3 6      GPIO3_M
GPIO_4 7    GPIO_5 8      GPIO5_M
GPIO_6 9    GPIO_7 10
GPIO_8 11   GPIO_9 12     GPIO9_M
GPIO_10 13  GPIO_11 14
GPIO_12 15  GPIO_13 16
GPIO_14 17  GPIO_15 18
GPIO_16 19  GND 20
GPIO_17 21  GPIO_18 22
GPIO_19 23  GPIO_20 24
GPIO_21 25  GPIO_22 26
GPIO_23 27  GPIO_24 28
VDD_5V 29   USB_DM 30     USB_DM_M
USB_DP 31   VDD_3V6 32    VBAT
VDD 33      VDD 34
VDD 35      Analog_S1 36  ADC_1_M
Analog_S2 37 Analog_M1 38 ADC_3_M
Analog_M2 39 GND 40

MVCC_33
RESETn_M OUTPUT
GPIO2_M
GPIO4_M
GPIO6_M
GPIO17_M
USB_DP_M
ADC_2_M

Y1 20pF 12MHz
PA14 C12 33pF 0402
PA15 C13 33pF 0402

ADC_1_MM R5 1K 0402 ADC_1_M
ADC_2_MM R6 1K 0402 ADC_2_M
ADC_3_MM R8 1K 0402 ADC_3_M
ADC_1_MM C14 10nF 0402
ADC_2_MM C15 10nF 0402
ADC_3_MM C16 10nF 0402

MVCC_33
JP2

R3 1K 0402
I2C_SDA_M
I2S_D
UART_1_TxD_M
UART_1_RTS_M

MVCC_33
UART_2_RxD_M
SPI_MISO_M
CSn_1_M
CSn_3_M
SWD_CLK_M
RSTn_M
R7 1K 0402
R10 49.9 0402

JP2 DF40C-30DP-0.4V(51)
VDD 1        I2C_1_SCL 2    I2C_SCL_M
I2C_1_SDA 3  I2S_CLK 4
I2S_D 5      I2S_RL 6
UART_1_Tx 7  UART_1_Rx 8    UART_1_RxD_M
UART_1_RTS 9 UART_1_CTS 10  UART_1_CTS_M
GND 11       UART_2_TxRx 12
RESET_Opt 13 CLK_Opt 14
GND 15       UART_3_Tx 16   UART_2_TxD_M
UART_3_Rx 17 SPI_SCLK 18    SPI_SCLK_M
SPI_MISO 19  SPI_MOSI 20    SPI_MOSI_M
SCSn_1 21    SCSn_2 22      CSn_2_M
SCSn_3 23    SCSn_4 24      CSn_4_M
JTAG_TCK 25  JTAG_TDI 26
JTAG_TDO 27  JTAG_TMS 28    SWD_DAT_M
JTAG_TRSTn 29 GND 30

MVCC_33
R4 1K 0402
I2C_SCL_M

MVCC_33
R9 220 0402
D1 LED_G 0603  OK
LED_OUT_M R11 47K 0402
Q1 2N3904 SOT-23

12.5pF Y2 32.768KHz
PA00 C17 18pF 0402
PA01 C18 18pF 0402

PA08 >>> I2C SDA
PA09 >>> I2C SCL
Modify

I2C_SDA_M
I2C_SCL_M
UART_1_RTS_M
UART_1_CTS_M
GPIO5_M
GPIO6_M
UART_1_TxD_M
UART_1_RxD_M
PA14
PA15