

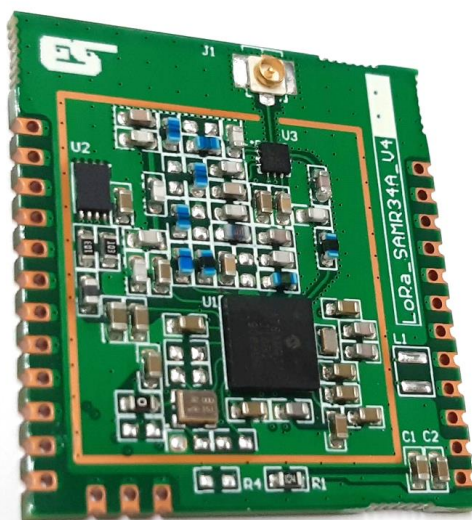
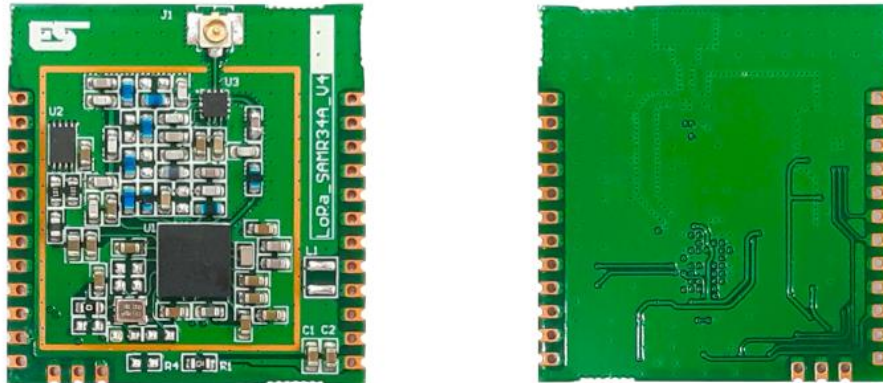


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1 Overview

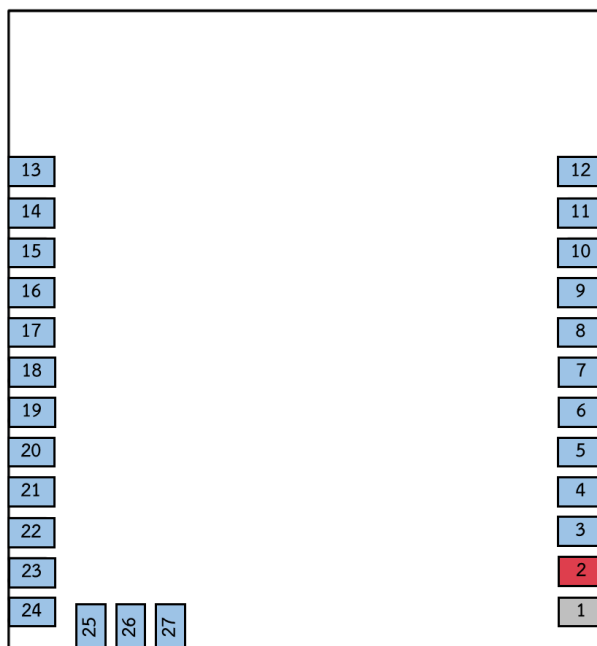
LoRa_SAMR34A_V4 module



- Based on ATSAMR34J18B LoRa IC
- Built in 2-Kbit Serial EEPROM + Factory-Programmed EUI-48™ Address
- External antenna with U.FL RF connectors (MHF)
- Frequency Range: 862 to 928 MHz
- Operating Voltage: 1.8V – 3.5V (Typ. 3.3V)
- Compatible assembly with surface mount or through hole (Pin header Pitch 2.00mm)

Note : For a detailed description on the supported peripherals, refer to the [ATSAMR34J18 \(Microchip\)](#)

2 Module Pinout



(Top View)

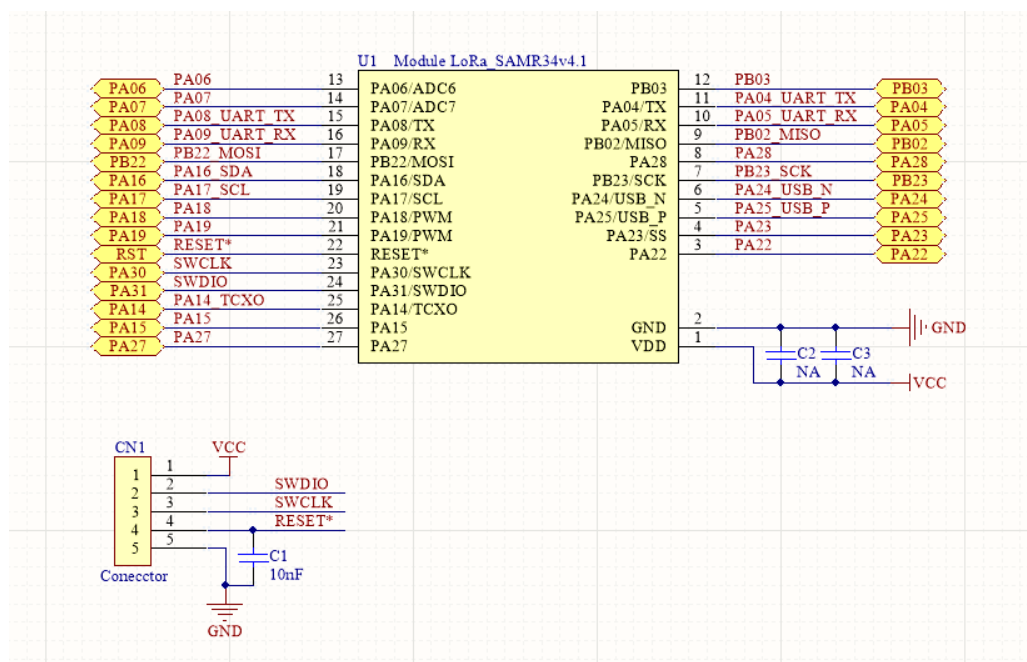
Table 2-1 : Module pinout table

Pin No.	Pin Name	Description	Pin No.	Pin Name	Description
1	VCC	Supply Voltage 1.8 - 3.5V (Typ. 3.3V)	15	PA08	UART_TX
2	GND	Ground	16	PA09	UART_RX
3	PA22		17	PB22	MOSI
4	PA23		18	PA16	SDA
5	PA25	USB_P	19	PA17	SCL
6	PA24	USB_N	20	PA18	
7	PB23	SCK	21	PA19	
8	PA28		22	RESET*	
9	PB02	MISO	23	PA30	SWCLK
10	PA05	UART_RX	24	PA31	SWDIO
11	PA04	UART_TX	25	PA14	TXCO
12	PB03		26	PA15	
13	PA06		27	PA27	
14	PA07				

Note : For more details on Pin descriptions, refer to [SAM R34/R35 Low Power LoRa Sub-GHz SiP Datasheet](#) (Table 5-

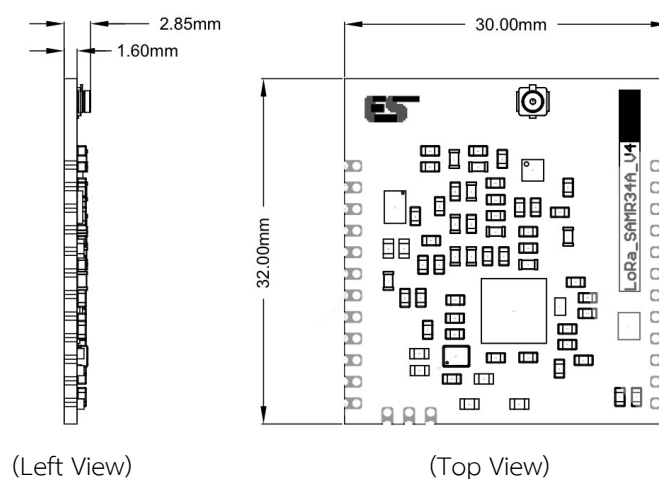
1. Port Function Multiplexing)

3 Reference Application Schematic



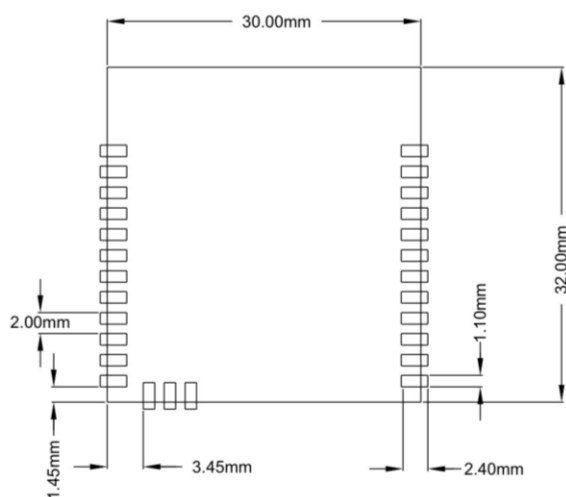
4 Module Information

4.1 Module Dimensions

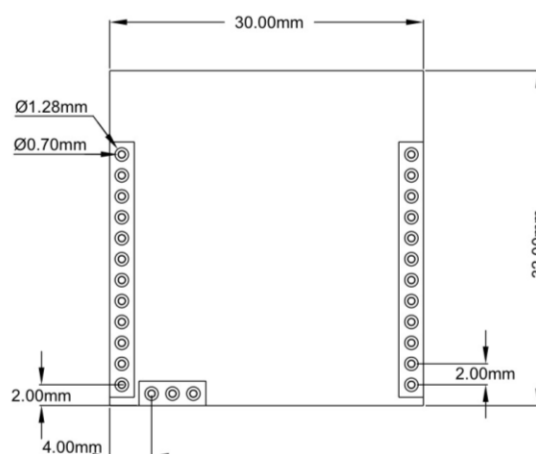


4.2 Footprint

The recommended land pattern is shown in the following figure.



(for SMT)

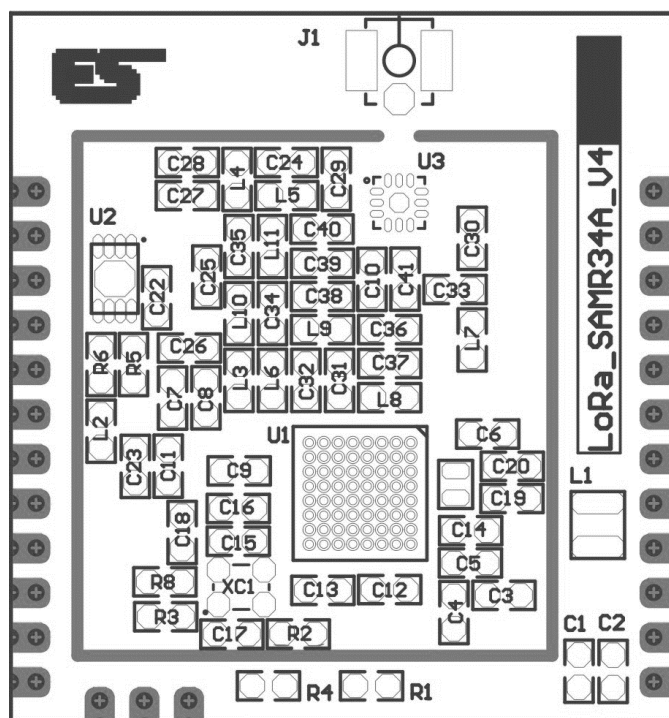


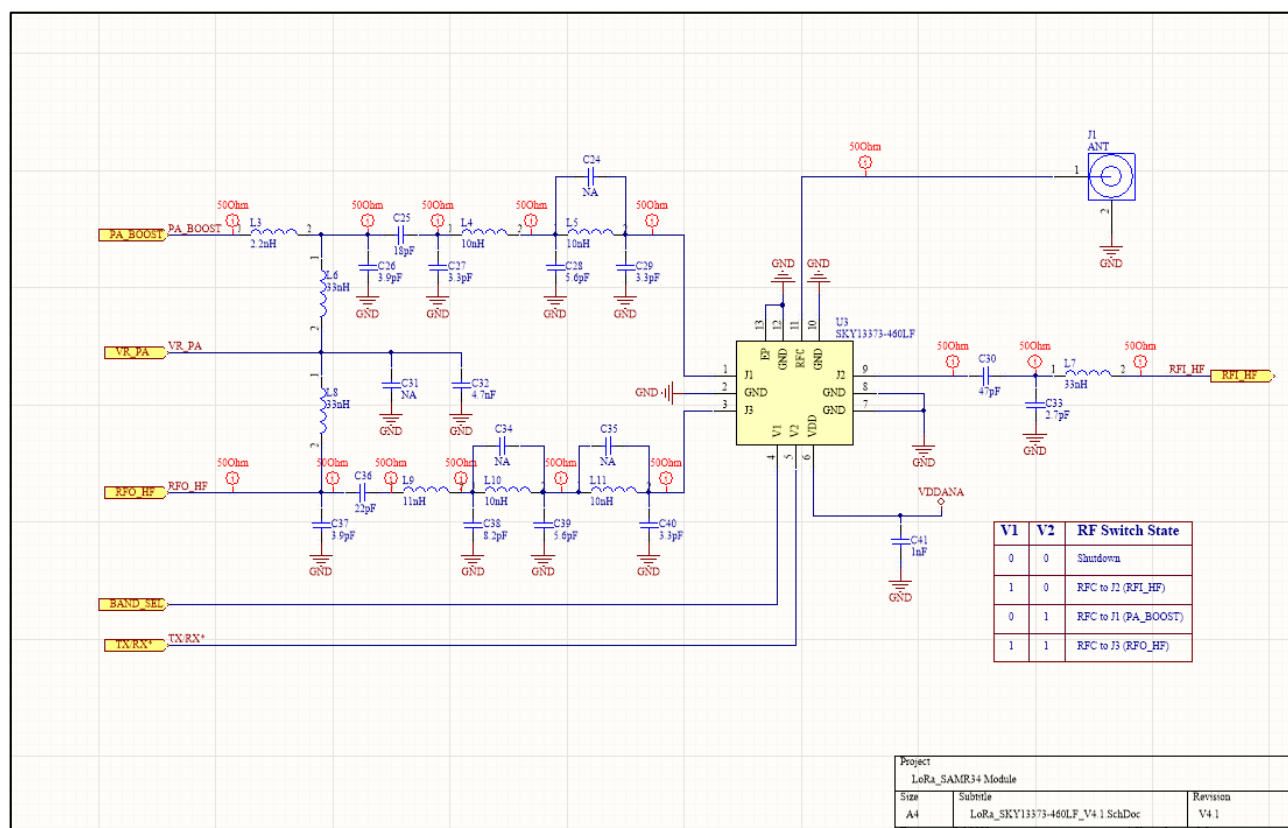
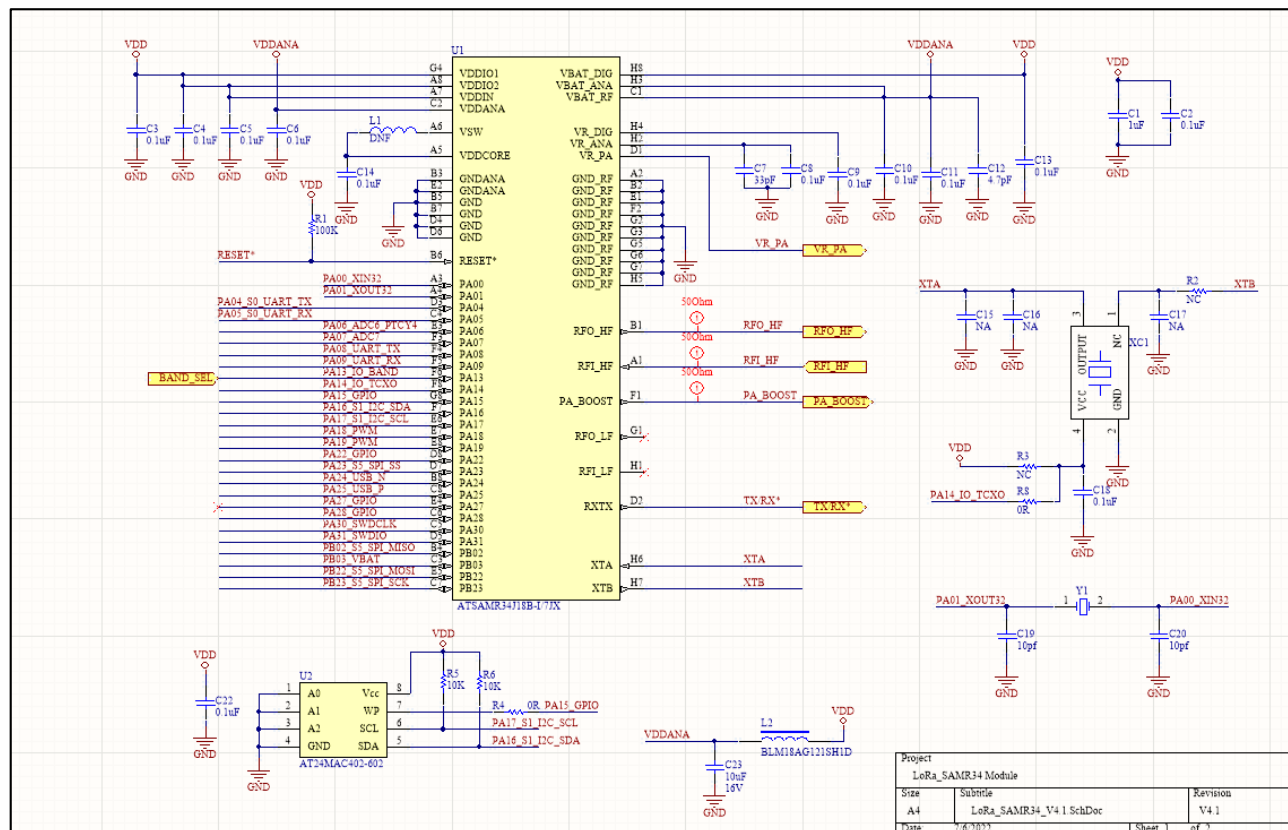
(for Pin header)

5 Appendix

5.1 Board Layout

LoRa_SAMR34A_V4 Layout (Top Assembly)





6 Reference Links

- [SAM R34/R35 Low Power LoRa Sub-GHz SiP Datasheet](#)
- [Microchip RF tools for LoRa](#) - RF tool can be used for detailed testing and RF certification
- [SAM R34 MLS Getting Started Guide](#)

7 Reversion History

Revision	Description	Date
1.0	Initial version	07-06-2022