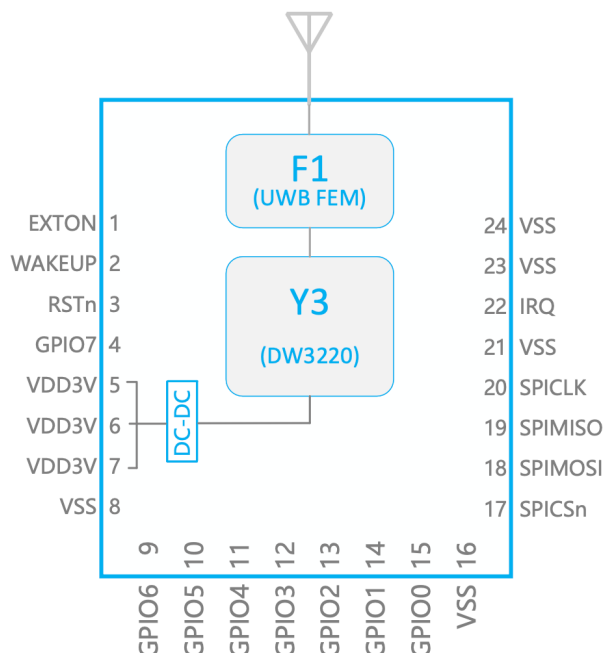# MAX3220

UWB high-power RF module

PRODUCT INTRODUCTION

YCHIOT ® MAX3220 is a product based on YCHIOT® The ultra wideband (UWB) RF module of DW3220 IC. It integrates all RF circuits, front-end amplifiers, power management, and clock circuits into one module, greatly simplifying the design time and cost for users. This module can be used for TOF or TDOA positioning systems, with a positioning error of less than 10cm and supporting data transmission rates of up to 6.8 Mbps.

MAX3220 series module design complies with FiRa™ PHY and MAC specifications, compatible with other FiRa compliant devices™ Standard equipment enables mutual communication. There are currently two models of MAX3220 series modules, among which MAX3220-SMA is an SMA interface, and MAX3220-X antenna port can be externally led out.

MAX3220-SMA   *MAX3220-X*

FEATURES

- Compatible with IEEE 802.15.4-2015 and IEEE 802.15.4z BPRF protocols
- Compatible with FiRa™ Physical layer, MAC, and authentication
- Supports channel 5 (6.5 GHz) and channel 9 (8 GHz)
- Maximum distance measurement 500m
- Supports programmable output power
- Fully coherent receiver, achieving maximum range and accuracy
- Design in compliance with FCC and ETSI
- Input power supply voltage 3.0 V -3.6 V
- Low power consumption
- Supports data rates of 850 kbps and 6.8 Mbps
- High data throughput, with a maximum packet length of 1023 bytes
- SPI communication interface
- Compatible with DWM1000/ DWM3220/ MAX2001/ MAX5007 pins

FUNCTIONAL BLOCK DIAGRAM

APPLICATION

- High precision real-time location system (RTLS) based on TOF or TDOA scheme
- Location aware wireless sensor network (WSN)

ORDER INFORMATION

MODEL	PACKAGE STYLES
MAX3220-SMA	1PCS in bags / 50PCS box-packed
MAX3220-X	1PCS in bags / 50PCS box-packed
MAX3220-SMA-EVK	MAX3220-SMA evaluation board