



LPWA (Low Power Wide Area) Sigfox Modules



PRODUCT PORTFOLIO	ABZ (Sigfox)	1QH	1NQ
PART NUMBER	CMWX1ZZABZ	LBAA0XV1QH	LBAA0ZZ1NQ
Supporting Zone	RCZ1, 2, 4 (*RCZ3 in plan) <small>(Z1: Europe, Oman, South Africa Z2: USA, Mexico, Brazil Z3: Japan Z4: Australia, New Zealand, Singapore, Taiwan, Hong Kong, Columbia, Argentina)</small>	RCZ3	RCZ3
Dimensions (mm)	12.5 x 11.6 x 1.76	12.8 x 9.4 x 1.95	28.0 x 15.1 x 2.8
Chipset	Semtech (SX1276) STM32L0 Series	On Semiconductor (AX-SFJK)	Texas instruments (CC1310)
Host Interface	UART	UART	UART
Peripheral	SPI, I ² C, GPIO, ADC	ADC, SPI, DAC	I ² C, Timer, ADC, PWM
Frequency (MHz)	860 ~ 930	TX: 923.2/ RX: 922.2	923.2
CPU/ MCU	ARM Cortex M0+/ 32 MHz	AX8052/ 20 MHz	ARM Cortex-M3/ 48 MHz
Flash/ SRAM Memory (KB)	192/ 20	64/ 8	128/ 20
Antenna Configuration	External	External	Embedded
CHARACTERISTICS			
Operating Temperature (°C)	-40 ~ +85	-40 ~ +85	-30 ~ +85
Supply Voltage (V)	2.2 ~ 3.6	2.1 ~ 3.6	2.1 ~ 3.6
Output Power (dBm)	14/ 20 (with PA boost)	13	13
TX	TBD	TBD @13 dBm	30 mA (typ.) @13 dBm
RX	TBD	TBD	N/A
Sleep	TBD	TBD	0.6µA (typ.)
CERTIFICATION			
Certification	FCC/IC Certified, CE Compliant; Sigfox Certified; TELEC Certified	<i>In progress (est. Dec'17)</i> Sigfox Certified; TELEC Certified	Sigfox Certified; TELEC Certified
SCHEDULE			
Evaluation Sample	Available	Available	Available
Mass Production	2018/ Q1	2018/ Q1	2018/ Q2

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Murata Manufacturing Co., Ltd.

<http://www.murata.com/en-global/products/lpwa>

***Remarks:** Samples displayed in actual dimension when output at 100%