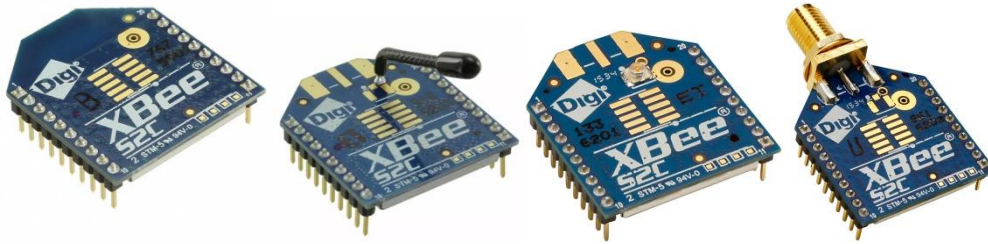


## XBee ZigBee TH(S2C)



XB24CZ7PIT-004

XB24CZ7WIT-004

XB24CZ7UIT-004

XB24CZ7SIT-004

XBee ZigBee RF 모듈은 효율적인 비용으로 에너지, 태양광, 자동화 및 무선제어 어플리케이션등을 효율적으로 제작 할수 있도록 도와주는 모듈입니다.

ISM2.4GHz 주파수 대역에서 작동되며, 기존의 S2, S2B(S2 Family) 제품과 서로 통신이 가능하고 빠른 속도의 인터페이스, RF성능 그리고 뛰어난 보안성으로 인하여 제품 개발에 따른 비용 및 시간을 절약 할수 있습니다.

무료로 제공 되는 X-CTU 프로그램을 이용하여 항상 최신 펌웨어의 업그레이드가 가능 합니다.

추가 개발 없이 간단한 방법으로 Mesh 통신이 가능한 XBee(S2C)는 EM35x(EM357와 EM3587)칩 (SoC)에 32-bit ARM Cortex™ M3 프로세서를 사용하는 무선IC를 기반으로 합니다.

### 스펙

	XBee S2C ZigBee	XBee-PRO S2C ZigBee	XBee S2D ZigBee Thread Ready
<b>PERFORMANCE</b>			
TRANSCEIVER CHIPSET	Silicon Labs EM357 SoC	Silicon Labs EM357 SoC	Silicon Labs EM3587 Soc
DATA RATE	RF 250 Kbps, Serial up to 1 Mbps		
INDOOR/URBAN RANGE	200 ft (60 m)	300 ft (90 m)	200 ft (60 m)
OUTDOOR/RF LINE-OF-SIGHT RANGE	4000 ft (1200 m)	2 miles (3200 m)	4000 ft (1200 m)
TRANSMIT POWER	3.1 mW (+5 dBm) / 6.3 mW (+8 dBm) boost mode	63 mW (+18 dBm)	3.1 mW (+5 dBm) / 6.3 mW (+8 dBm) boost mode
RECEIVER SENSITIVITY (1% PER)	-100 dBm / -102 dBm boost mode	-101 dBm	-100 dBm / -102 dBm boost mode
<b>FEATURES</b>			
SERIAL DATA INTERFACE	UART, SPI		
CONFIGURATION METHOD	API or AT commands, local or over-the-air (OTA)		
FREQUENCY BAND	ISM 2.4 GHz		

FORM FACTOR	Through-Hole, Surface Mount	Through-Hole, Surface Mount	Surface Mount
INTERFERENCE IMMUNITY	DSSS (Direct Sequence Spread Spectrum)		
ADC INPUTS	(4) 10-bit ADC inputs		
DIGITAL I/O	15		
ANTENNA OPTIONS	Through-Hole: PCB Antenna, U.FL Connector, RPSMA Connector, or Integrated Wire SMT: RF Pad, PCB Antenna, or U.FL Connector		
OPERATING TEMPERATURE	-40° C to +85° C		
DIMENSIONS (L X W X H) AND WEIGHT	Through-Hole: 0.960 x 1.087 in (2.438 x 2.761 cm) SMT: 0.866 x 1.33 x 0.120 in (2.199 x 3.4 x 0.305 cm)	Through-Hole: 0.960 x 1.297 in (2.438 x 3.294 cm) SMT: 0.866 x 1.33 x 0.120 in (2.199 x 3.4 x 0.305 cm)	SMT: 0.866 x 1.33 x 0.120 in (2.199 x 3.4 x 0.305 cm)
<b>PROGRAMMABILITY</b>			
MEMORY	Standard: N/A Programmable: 32 KB Flash/2 KB RAM	Standard: N/A Programmable: 32 KB Flash/2 KB RAM	N/A
CPU/CLOCK SPEED	Standard: N/A Programmable: HCS08/up to 50.33 MHz	Standard: N/A Programmable: HCS08/up to 50.33 MHz	N/A

<b>NETWORKING AND SECURITY</b>			
PROTOCOL	ZigBee PRO 2007, HA-Ready with support for binding/multicasting		
ENCRYPTION	128-bit AES		
RELIABLE PACKET DELIVERY	Retries/Acknowledgements		
IDS	PAN ID and addresses, cluster IDs and endpoints (optional)		
CHANNELS	16 channels	15 channels	16 channels
<b>POWER REQUIREMENTS</b>			
SUPPLY VOLTAGE	2.1 to 3.6V	2.7 to 3.6V	2.1 to 3.6V
TRANSMIT CURRENT	Standard: 33 mA @ 3.3 VDC/45 mA boost mode Programmable: 47 mA @ 3.3 VDC/59 mA boost mode	Standard: 120 mA @ 3.3 VDC Programmable: 120 mA @ 3.3 VDC	33 mA @ 3.3 VDC / 45 mA boost mode
RECEIVE CURRENT	Standard: 28 mA @ 3.3 VDC/31 mA boost mode Programmable: 42 mA @ 3.3 VDC/45 mA boost mode	Standard: 31 mA @ 3.3 VDC Programmable: 45 mA @ 3.3 VDC	28 mA @ 3.3 VDC / 31 mA boost mode

POWER-DOWN CURRENT	Standard: <1 µA @ 25° C Programmable: 1.5 µA @ 25° C	Standard: <1 µA @ 25° C Programmable: 1.5 µA @ 25° C	<3 µA at 25° C
<b>REGULATORY APPROVALS</b>			
FCC, IC (NORTH AMERICA)	Yes	Yes	Yes
ETSI (EUROPE)	Yes	No	Yes
RCM (AUSTRALIA AND NEW ZEALAND)	Yes	Yes	No (Coming Soon)