



17.6 x 11.4 mm

FEATURES

- Bluetooth Low Energy (Bluetooth SMART)
 modules fully certified for Bluetooth 4.1
 with on-board support for profiles
 including Battery Status, Blood pressure
 monitor, Proximity, Thermometer,
 Glucose and many more.
- Small size enables integration into most sensor products and applications
- ARM® Cortex™ M3-based microprocessor core
- Programmable RF transmit power control and on-board PCB-style antenna
- Powered directly from a battery or mains supply
- Secure Over-the-Air (OTA) software update using industry-standard AES-128 security
- Easily integrated into existing or new products using TruConnect, ACKme's configurable Bluetooth Low Energy application (pre-installed on every module)
- Custom application development on the module with the Broadcom WICED® Smart Software Development Kit

APPLICATIONS

- Wireless serial cable replacement
- Health & Fitness equipment including heart rate monitors, blood pressure, thermometers, pedometers, weight scales
- Retail advertising and beaconing, proximity detection, point-of-sale
- Control, automation, security and monitoring of environmental data
- · Consumer: Toys, robots, remote controls

AMS001/AMS002 'Bobcat'

Bluetooth Low-Energy: The 'Smart' Solution

Add ultra-low power wireless connectivity to your application in a heartbeat

GET TO MARKET, FAST!

The 'Bobcat' family of Bluetooth SMART modules from ACKme Networks vastly reduces development effort and fast-tracks your latest wireless product to market.

HIGHLIGHTS

The AMS001/AMS002 'Bobcat' family of modules are fully certified small form factor, ultra-low power and low-cost Bluetooth Low Energy (Bluetooth SMART) modules perfectly suited to battery and powered operation for medium to high-volume applications. Both modules have identical specifications, with the AMS001 offering ultra-low power, and the AMS002 offering the lowest cost.

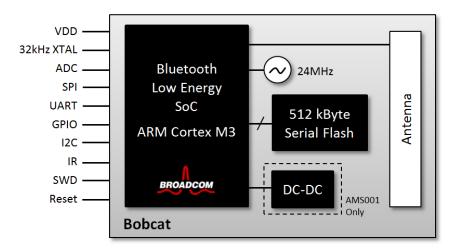
All modules provides an integrated Bluetooth Low Energy stack, support over the air (OTA) upgrade in conjunction with the integrated serial Flash, and include an on-board PCB-style antenna all in a physical footprint of just $17.6 \times 11.4 \times 2.3$ mm.

ACKme TruConnect firmware is pre-installed on all Bobcat modules. TruConnect is an easy-to-use application enabling module control and configuration via a UART-serial interface. TruConnect virtually eliminates difficult and time-consuming software development effort and vastly reduces product development cycles.

For customers that prefer to write a custom application replacing TruConnect, ACKme provides support for on-module development using the WICED Smart Software Development Kit from Broadcom®.

SYSTEM ARCHITECTURE





AMS001/AMS002 SPECIFICATIONS

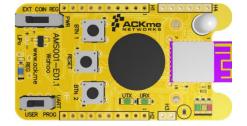
Wireless Standard	Bluetooth version 4.1					
Frequency Band	2400 – 2500 MHz					
Bluetooth Smart Use Cases	Wireless cable replacement, Battery status, Blood pressure monitor, Proximity, Thermometer, Glucose meter, plus many more					
Communications Interfaces	UART, SPI, I2C, SWD					
Peripherals	GPIO, ADC, PWM					
Data Throughput	270 kbit/s					
Microprocessor & Memory	ARM Cortex-M3 with 60kB RAM (when used with the WICED Smart SDK)					
Max. RF Transmit Power	+4 dBm					
Receive Sensitivity	-94 dBm					
Communications Range	>50m (150ft) line of sight					
Antenna	Integrated PCB-style					
Power Consumption @ 3.0V, 25°C	Deep Sleep : 0.65 μA Sleep : 12 μA					
		Active Rx (mA)	Active Tx (mA)	Lowest Power	Lowest Cost	
	AMS001	9.8	9.1	\checkmark		
	AMS002	24.5	22.8		\checkmark	
Supply Voltage	1.8V – 3.6V	1.8V – 3.6V				
Operating Temperature	-30°C to +85°C					
Size	17.6 x 11.4 x 2	17.6 x 11.4 x 2.3 mm (0.70 x 0.45 x 0.09 inches)				
Certifications	FCC, CE, IC					
Software	ACKme TruConnect serial Bluetooth Application is pre-installed on all modules					

EVALUATION BOARDS

Evaluating the Bobcat family of modules using ACKme's TruConnect serial Bluetooth software is easy. Simply plug the board into a PC using a standard USB cable, open a terminal and start typing!

The evaluation board includes:

- USB-serial interface for simplified UART communications
- Four different power supply options including 3V lithium coin cell,
 Li-Po battery (with integrated charging circuit), external 3.3V and USB
- Peripheral interface including two buttons, five LEDs for I/O control and status indication, speaker for audio output and a thermistor for temperature measurement
- Expansion headers to break out every pin on the module
- Reset button







Or for more information, visit us online at http://ack.me

AMS001 (Bobcat LP)	AMS001 Ultra-low power surface mount module	
AMS002 (Bobcat)	AMS002 Low power, lowest cost surface mount module	
AMS001-E01 (Wahoo)	AMS001 Surface-mounted on Wahoo Evaluation Boar	



ABOUT ACKme NETWORKS, INC.

ACKme Networks offers a range of industry leading cloud-connected wireless communication modules including Wi-Fi, Bluetooth, Bluetooth Low Energy and GPRS cellular. ACKme is headquartered in Silicon Valley, USA with a design centre in Sydney, Australia and a range of international distributors.

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Bluetooth Development Tools - 802.15.1 category:

Click to view products by Silicon Labs manufacturer:

Other Similar products are found below:

DA14580PRODTLKT 1628 MBH7BLZ02-EF-KIT CYBLE-014008-PROG FWM7BLZ20-EB-KIT ATSAMB11ZR-XPRO SKY6611121EK1 SECO-RSL10-TAG-GEVB ENW89857AXKF 3026 MIKROE-2471 MOD-NRF8001 BLE-IOT-GEVB 450-0184 MIKROE-2399
EKSHCNZXZ EVAL_PAN1026 EVAL_PAN1720 EVAL_PAN1740 2267 2479 2487 2633 STEVAL-IDB005V1D STEVAL-IDB001V1
MIKROE-2545 SIPKITSLF001 2995 STEVAL-IDB007V1M 2829 DFR0267 DFR0296 DFR0492 TEL0073 BM-70-CDB WSM-BL241ADA-008DK STEVAL-BTDP1 ACD52832 TEL0095 ISP1507-AX-TB RN-4871-PICTAIL DA14695-00HQDEVKT-P DA1469500HQDEVKT-U EVK-NINA-B112 EBSHJNZXZ EKSGJNZWY EKSHJNZXZ BMD-200-EVAL-S ACN BREAKOUT BOARD ACN
SKETCH