



BTT-ONE
USER GUIDE



Multiple Use BTT-ONE

BTT-ONE is an GPS vehicle tracking device offers multiple options , high quality, and small form factor. Made from high accuracy GPS receiver and Super quality 3G module with Quad bands GSM/GPRS. Measureable all necessities signal for fleet management such as Engine Ignition, Break , Fuel Sensor , etc.

BTT-ONE Feature

- Module GSM SARA-U201
- GPS Receiver Ublox Max-8Q
- Download Over The Air Through FTP
- 2 Megabytes Non Volatile Memory for data buffer
- Varies Range Input Power Supply 9-42 V with overvoltage Protection
- Digital Input / Output / ADC / 1-wire to interface with external sensor devices.
- Integrated Superior Watchdog Timer
- Internal 3G Antenna
- Small Form Factor
- Integrated SIM Holder
- Low power consumption
- OEM & ODM upon request



BTT-ONE Specifications



RADIO

3G	850/850/900/1900/2100 MHz
GSM / GPRS / EDGE	850/900/1800/1900 MHz

PERFORMANCE

OPERATING TEMPERATURE	- 40 to + 85 °C
GSM	SARA-U201
GPS	GPS Receiver Ublox Max-8Q

ELECTRICAL CHARACTERISTICS

OPERATING VOLTAGE	9 – 42 Volt DC.
DIGITAL INPUT	3 CHANNELS
ANALOG INPUT	1 CHANNEL (12 bits)
DIGITAL OUTPUT	1 OPEN COLLECTOR

POWER CONSUMPTION

TRACKING 3G/4G	< 70 mA. (average)
PEAK CURRENT (INSTANTANEOUS)	< 400 mA.

PHYSICAL CHARACTERISTICS

CONNECTOR	AUDIO , 4,8,10 PINS MICRO-FIT , 1 SMA
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BATTERY BACKUP

BATTERY	900 mAh
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GPS Satellite



GPS Tracking



Applications:

Server



Internet Connection



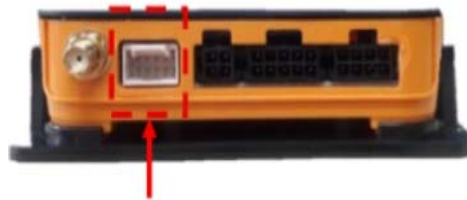
Computer System



Hardware Description :



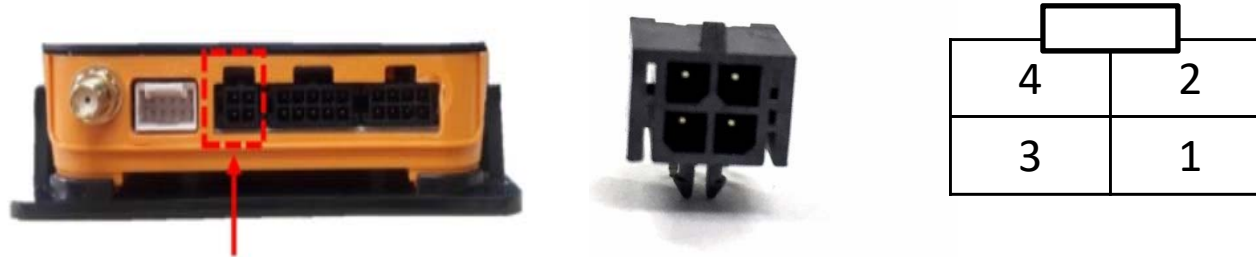
Audio Connector



10	8	6	4	2
9	7	5	3	1

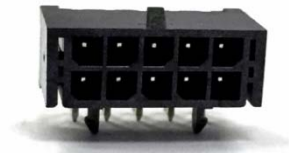
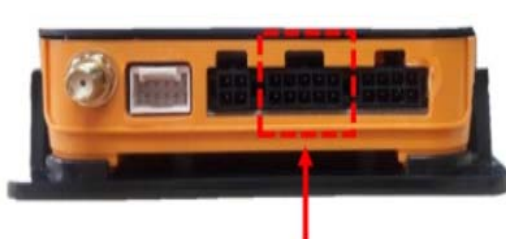
CH	ASSIGNMENT	I/O TYPE	DESCRIPTIONS
1	GND	Supply	
2	POWER 5V	Supply	Power Supply Output
3	SPK - N	Analog	Speaker Out (-)
4	SPK - P	Analog	Speaker Out (+)
5	MIC - N	Analog	Microphone (-)
6	MIC - P	Analog	Microphone (+)
7	RESERVED		
8	RESERVED		
9	RESERVED		
10	RESERVED		

Communication Connector



CH	ASSIGNMENT	I/O TYPE	DESCRIPTIONS
1	GND	Supply	
2	TX	RS232	UART-Transmit
3	POWER 5V	Supply	Output Power Supply
4	RX	RS232	UART-Receive

Power and I/O Connector



10	8	6	4	2
9	7	5	3	1

CH	ASSIGNMENT	I/O TYPE	DESCRIPTIONS
1	GND	Supply	
2	POWER IN	Supply	Power Supply Input
3	INPUT2	12-36V	Digital Input 2
4	INPUT1/IG_OUTPUT	12-36V	Digital Input 1
5	1-Wire Data		1-Wire
6	INPUT3	12-36V	Digital Input 3
7	ADC	0-48V	A/D Converter
8	OUTPUT1	Open Drain	Digital Output 1
9	GND	Supply	
10	1-Wire Power	5V	1-Wire

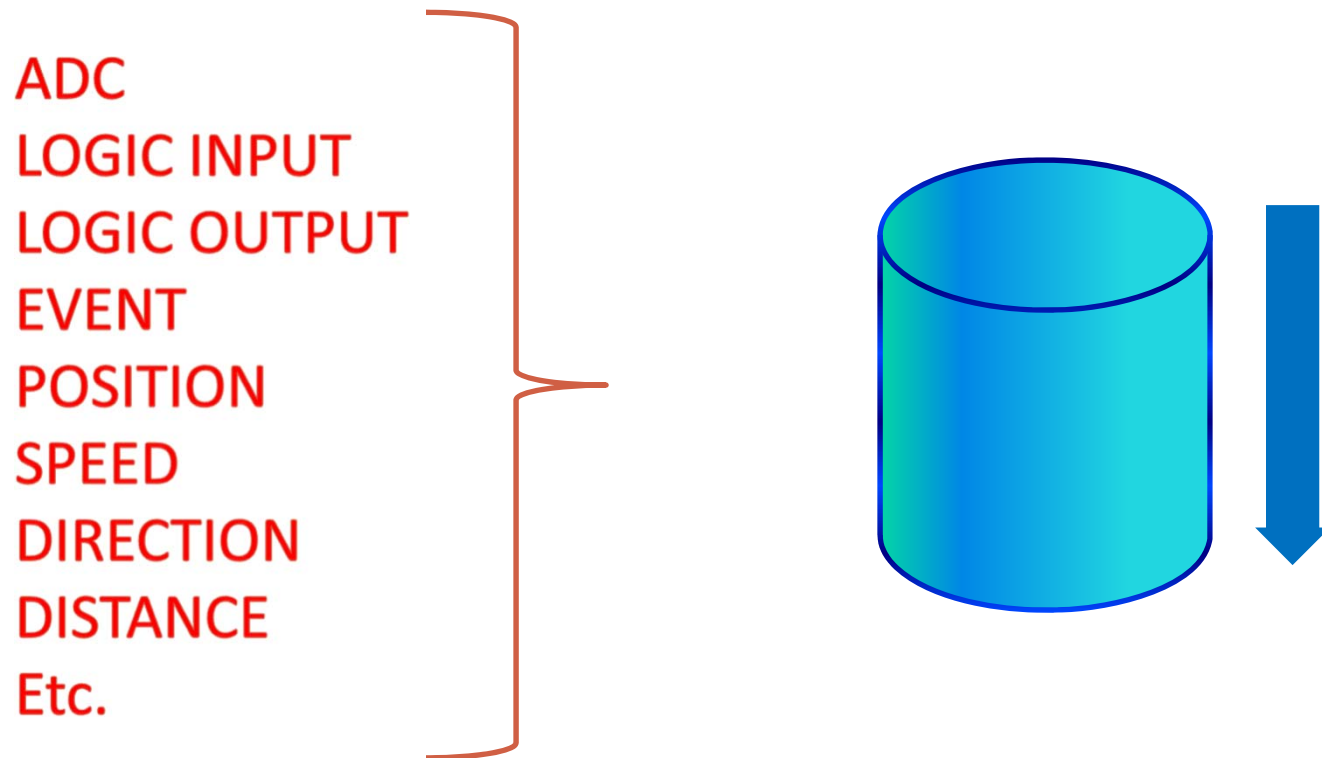
Communication Connector (Option)



8	6	4	2
7	5	3	1

CH	ASSIGNMENT	I/O TYPE	DESCRIPTIONS
1	GND	Supply	
2	RX1	RS232	Serial Receive
3	POWER 5V (CH1)	Supply	Power Supply Output
4	TX1	RS232	Serial Transmit
5	GND	Supply	
6	RX2	TTL	Serial Receive
7	POWER 5V (CH2)	Supply	Power Supply Output
8	TX2	TTL	Serial Transmit

Queue Buffer (FIFO):



LED Indicator



LED 3G

	OFF	SIM CARD NOT READ
	ON	SIM CARD READY
BLINK 1:1		REGISTERED
BLINK 3:1		PPP-IP-Received

LED GPS

	OFF	POWER OFF
	ON	GPS LOSS
BLINK 3:1		GPS FIX 3D

LED NET

	OFF	SEVER DOESN'T CONNECT
	ON	SERVER CONNECTED
BLINK 1:1		SERVER CONNECTED BUT UNSTABLE (LOW SIGNAL)

LED ACT

	OFF	NOT DEFINED
	ON	NOT DEFINED
BLINK 1:1		RECEIVE DATA FROM SERVER

LED AUX

	OFF	IG ON
	ON	IG OFF
BLINK 1:1		BOOT LOADING

Event code

Event Code	Meaning
0x10	Active Mode Entry (Driving)
0x20	I/O Changed
0x30	Over Speed
0x35	Trailed (Engine off and movement)
0x40	Idle Mode Entry (Parking)
0x41	Idle Mode Entry (Engine on and no movement)
0x81	GPS Loss
0x90	Start up
0x98	External Power Recovery
0x99	External Power loss
0xD4	Card login
0xD5	Card logout

Accessories:



GPS active antenna with cable



POWER IO CABLE