

ESTRIDE Harmony

ESHAR-V1T1

Applications

- Measure Saddle Pressure
- Measure Rider Balance
- Tracking Pressure over time
- Rider Performance Measurement

Product Features

- Package Dimensions: 1048 x 540 x 291 mm
- Micro SD card for storing large amount of data.
- Bluetooth 4.0 LE for faster data transfer at lower power consumption.
- Multiple LED's for visual feedback
- Built battery charger circuit.
- Wireless communication.



Description

The electronic component of this device is the controlling device providing dedicated commands to receive the data. The Component features an 8-bit microcontroller as its processing power with 32 Kb flash memory and 2 Kb of internal SRam. It also accommodates Bluetooth 4.0 LE for accessing the data via mobile.

The Component also has a Micro SD card. It has a built in charger to easily recharge the battery of 850mAh via Micro USB connector.

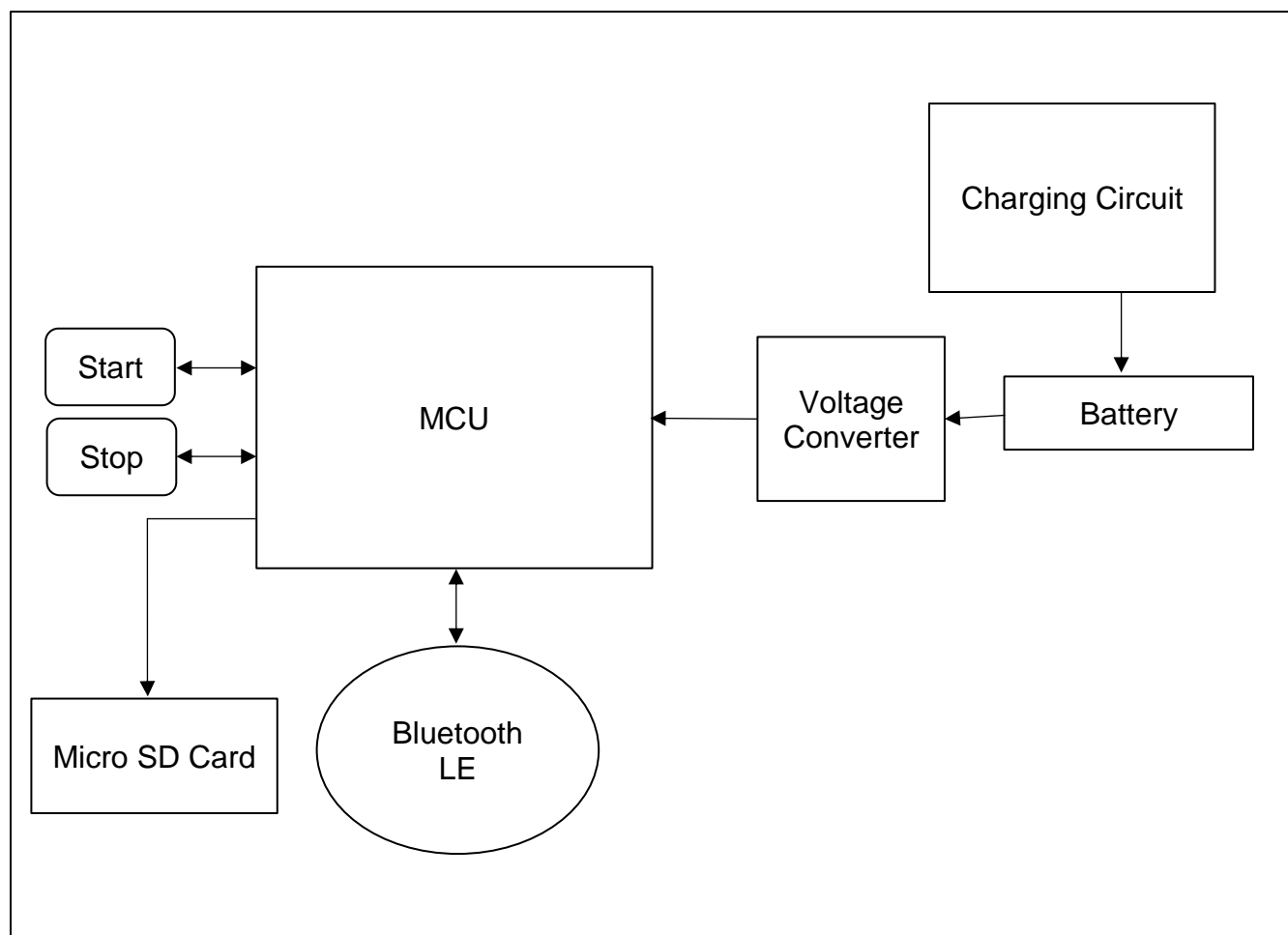
It has multiple LED's for visual feedback to make it easier for the user to interact with the device. It also houses physical start and stop button to initiate or pause the data being received.

ESTRIDE TRACKER - HARMONY ESHAR-V1T1

Technical Specifications

Parameter	Min	Type	Max	Units
Supply Voltage	3.75	-	6	V
Supply Current	-	.5	1.5	A
Operating Voltage	2.7	3.3	3.7	V
Current Consumption	1	-	100	mA
Battery Voltage	3.7	-	4.2	V
Battery Capacity	-	-	850	mAh
Battery Life	8	10	15	hrs
Temperature Range	-40	-	100	°C

Functional Block Diagram



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RF Specifications

Bluetooth Low Energy

FCC ID: 2AB6YHM-1011V1

Parameter	Min	Typ	Max	Units
Indoor/Urban Range	2	4.0	5	m
Outdoor Range (Line of Sight)	1	-	3	m
Data transfer date	9600	-	115200	bps
Operating Frequency	2.402	-	2.481	Ghz
RF Power	-23	-	6	dBm
Power Consumption	0.005	-	9	mA

Harmony Mat Technical Specifications

Parameter	Min
No. Of Sensors	961
Sensor Resolution	0.35 sensors/cm ²
Mat Dimensions	63 x 68 cm
Active Sensing Area	51.8 x 52 cm
Mat Thickness	3 mm
Mat Weight	
Max Pressure Range	1kPa – 150kPa
Measurement Frequency	Instant Mode- 3 Hz SD Record Mode- 5 Hz
Storage Type	4 GB SD Card
Power Supply	Li-Po battery, 2 Hrs
Mobile Interface	Bluetooth (BLE 4.0)