DC-BLE-1

Manual Revision: 2022-09-20

Covers Firmware Revision:
DC-BLE-1: v1.20

Covers PCB Revision: C

SPECIFICATIONS

Test setup

Chip	nRF52832 QFAAE0
Softdevice	sI32 6.1.0
Voltage	3.0 V
Regulator	DCDC

BLE event details

Interval	9005.00 ms
Length	3.63 ms

Data transmission

On air data rate	1 Mbps

Current consumption

BLE event total charge	8.78 µC
LF clock calibration current	1.0 µA
Idle current	2.4 µA
Total average current	4.3 µA

GENERAL INFORMATION

DevCircuits' DC-BLE-1 product will transmit a packet of data approximately every 9 seconds in the 2.4 GHz radio frequency band.

PRODUCT PROGRAMMING

The DC-BLE-1 has no programmable parameters. Future features may be enabled/disabled by resistors R1 through R3 located on the component side of the printed circuit assembly.

THEORY OF OPERATION

The DC-BLE-1 is comprised of a printed circuit assembly, several discrete components, a micro-controller and a coin cell battery holder.

It is powered by a 3V button cell CR-1025 battery. The PCB accepts power through soldered Keystone battery holder located on one side of the device. The supply voltage can be in the range of 3.0 to 3.6 VDC.

The main processing unit of DC-BLE-1 is the Nordic Semi nRF52832. It is a micro-controller with a 2.4GHz transceiver. Memory configuration is 192 Kbytes of Flash and 24 Kbytes of RAM. When the device is powered, it will begin to transmit a packet of data approximately every 9 seconds.

Only soft device firmware provided by Nordic Semiconductor and firmware written by DevCircuits, LLC and its' affiliates can be installed on the DC-BLE-1. The firmware for the DC-BLE-1 is solely controlled by DevCircuits, LLC. and is not distributed to end users.

The DC-BLE-1 is housed in a weatherized, PCB/ABS hybrid enclosure and houses a tuned antenna inside.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

CAUTION: The grantee is not responsible for any changes or modifications not expressly approved by the party responsible for compliance. Such modifications could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy, and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

– Reorient or relocate the receiving antenna.
– Increase the separation between the equipment and receiver.
– Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
– Consult the dealer or an experienced radio/TV technician for help.

FCC PACKAGE LABEL

GUNNY Gun Leash LLC

PRODUCT NAME: DC-BLE-1
PRODUCT MODEL: DC-BLE-1

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FCC ID: 2A8JQ-DCBLE1

CONTACT INFORMATION

DevCircuits, LLC.
2030 N. Forbes Blvd. #101
Tucson, Arizona 85745 USA

Main: 520-884-7981
E-mail: sales@devcircuits.com