: GETEC-C1-09-037 Test Report Number : GETEC-E3-09-027

APPENDIX I : OPERATIONAL DESCRIPTION

EUT Type: Phone Adapter FCC ID.: UXZBSH100



Operation Description

General Description (BlueCoreTM5-Multimedia Flash)

BlueCoreTM5-Multimedia Flash is a single-chip radio and baseband IC for Bluetooth 2.4GHz systems. BlueCore5-Multimedia Flash contains 8Mbit internal Flash memory, which makes it one of the most powerful and flexible Bluetoooth audio solutions with the smallest PCB footprint on the market today. When used with CSR Bluetooth stack, it provides a fully compliant Bluetooth v2.1 specification for data and voice.

Device Features (BlueCoreTM5-Multimedia Flash)

- Fully Qualified Bluetooth v2.1+EDR specification System
- Preliminary Support for v2.1
- Best-in-class Bluetooth Radio with +8dBm Transmit Power and -90dBm Receive Sensitivity
- 64MIPS Kalimba DSP Co-processor
- 16-bit Internal Stereo CODEC 95dB SNR for DAC
- Low-power 1.5V Operation, 1.8V to 3.6V I/O
- Integrated 1.5V and 1.8V Linear Regulators
- Integrated Switched-mode Regulator
- Integrated Battery Charger
- USB, I2C and UART with Dual Port Bypass Mode to 4Mbits/s
- 8Mbits of Internal Flash Memory
- Multi-Configurable I2S, PCM or SPDIF Interface
- Enhanced Audibility and Noise Cancellation
- 7 x 7 x 1.3mm, 0.5mm pitch LFBGA
- Support for IEEE 802.11 Co-existence
- RoHS Compliant

Applications

- Bluetooth-enabled Automotive Wireless Gateways
- High-quality Stereo Wireless Headsets
- High-quality Mono Headsets
- Hands-free Car Kits
- Wireless Speakers
- VOIP Handsets
- Analogue and USB Multimedia Dongles

BlueCore5-Multimedia Flash contains the Kalimba DSP co-processor with double the MIPS and double the memory of BlueCore3-Multimedia, supporting enhanced audio applications.

BlueCore5-Multimedia Flash is designed to reduce the number of external components required which ensures production costs are minimised.



13.2 Recommended Operating Conditions

Operating Condition		Min	Тур	Max	Unit
Operating Temperature Range ^(a)		-30°C	-	+85°C	°C
Core Supply Voltage	VDD_LO, VDD_RADIO, VDD_ANA, VDD_CORE and VDD_AUDIO	1.42	-	1.57	٧
I/O Supply Voltage	VDD_PIO, VDD_USB and VDD_PADS	1.7	3.3	3.6	٧
	VDD_MEM	TBD	1.8	1.95	V

2 Device Diagram

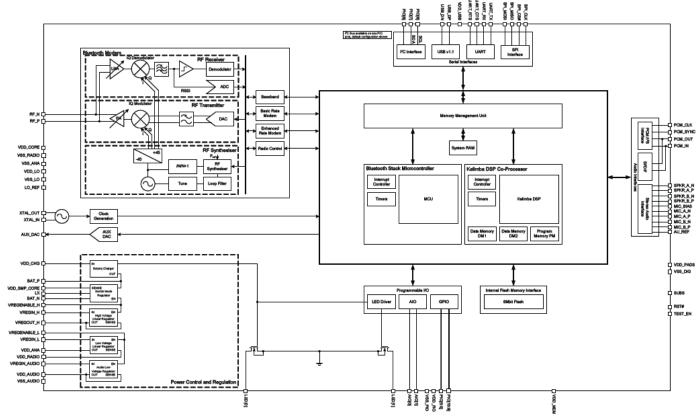


Figure 2.1: BlueCore5-Multimedia Flash Device Diagram

- Model: BS-H100

- Power Supply:5.1 V 700mA

- Operating Current: ≤210mA(@5.1V)- Receiver Frequency: 2402 ~ 2480 MHz

- modulation: GFSK (Gaussian FrequencyShiftKeying_

- Standby Current: ≤12mA(@5.1V)