Mr. Flash U172
BB55 Series

Table of Contents

Revision History

Revision	Date	History	Remark
A.0	09/11 '06	New Creation	

1. Introduction to U172

The **U172** gives you portability and security to offer you a peace of mind. Compatible with USB 2.0 / 1.1 specifications with low power consumption and data protection.

2. Main Features Overview

- ♦ Compact metallic casing with futuristic design
- ♦ Mobile USB flash drive, USB 2.0 compatible
- ♦ Hot swappable, USB Plug & Play compatible
- ♦ LED indicator with three modes: Busy, waiting, and off
- ♦ Multimedia and data storage
- ♦ Support software for password protection, formatting & partitioning (Not Included)

3. Product Specification

USB Interface	High-speed USB 2.0 interface; backward compatible with USB 1.1	
NAND Flash Interface	Integrated ECC circuits for 4-bit error correction	
OS Support	No drive is required for Windows ME, 2000,XP or Mac OS 9.x	
Environment		
Temperature	Operating	0℃ to 65℃
	Non-Operating	-20℃ to 75℃
Vibration	Operating	0.2G
	Non-Operating	15G
Shock resistant	Operating	150G
	Non-Operating	1000G
Configuration		
Capacity		128MBytes ~ 2GBytes
Reliability		
MTBF(@25℃)		1,000,000 hours
Power Requirement		
Voltage		DC 3.3/5V ± 10%
Power Consumption		
Read		<100mA
Write		<120mA
Standby		<100mA
Un-configuration		<100mA
Suspend		<1.5mA

4. Block Diagram
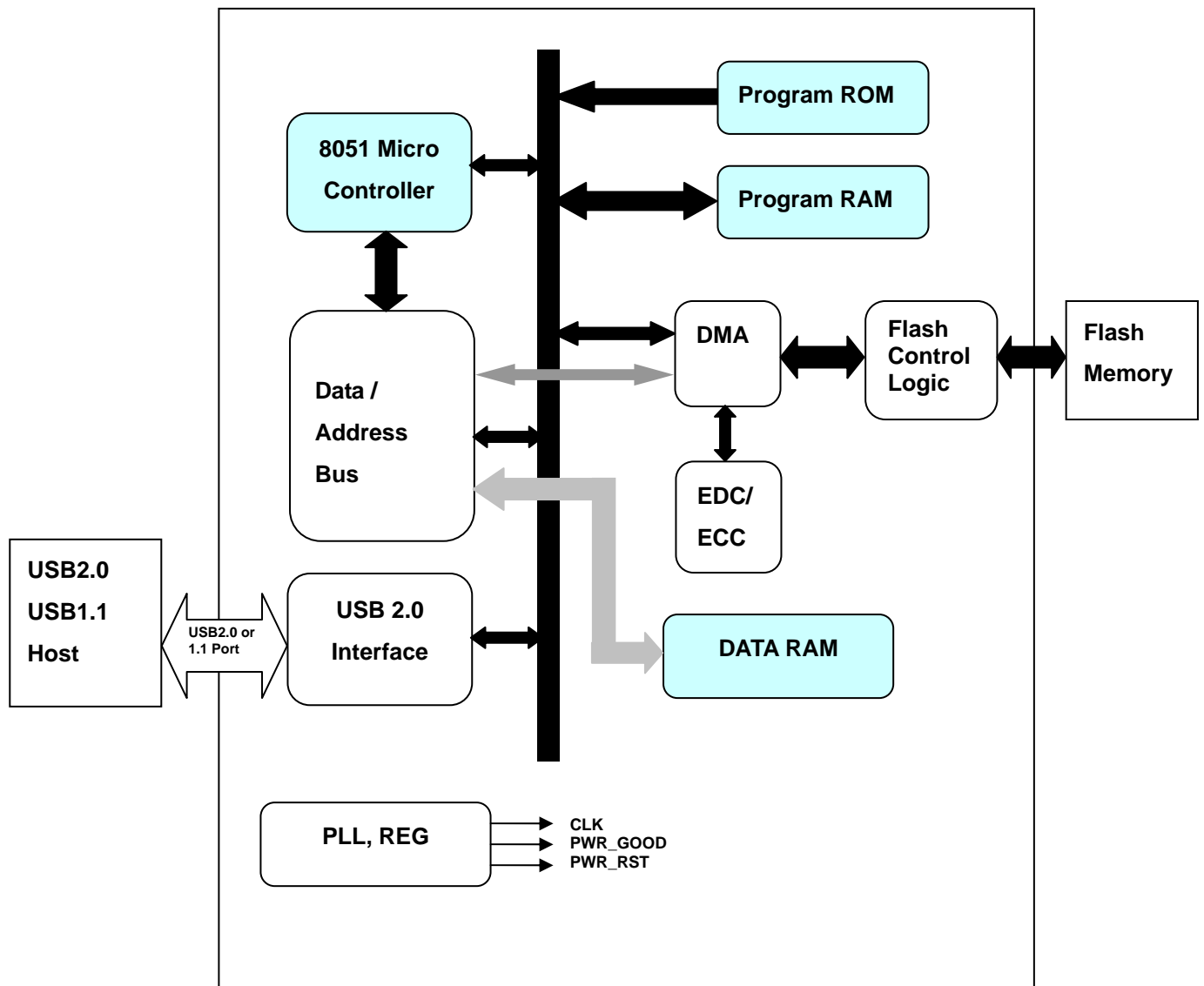
5. Absolute Maximum Ratings

Symbol	Parameter	Min	Max	Unit
Tstorage	Storage Temperature	-20	75	℃
Ta	Ambient Operating Temperature	0	65	℃
Vcc3	3.3V Supply Voltage	-0.3	3.6	V
Vcc18	1.8V Supply Voltage	-0.3	2	V
Vin3.3	3.3V Buffer Input Voltage	-0.3	3.6	V
Vin3/5	3.3V/5V Buffer Input Voltage	-0.3	5	V
Vin1.8	1.8V Buffer Input Voltage	-0.3	2	V

6. DC Characteristics

Symbol	Parameter	Min.	Typical	Max.	Units
V_{DD}	Supply voltage for VCC3 or VCC3A	3.0	3.3	3.6	V
V_{DD18}	Regulator output voltage for VCC or VCCA	1.62	1.8	1.98	V
V_{IL}	Input Low Voltage	-0.5		0.8	V
V_{IH}	Input High Voltage	2.0			V
V_{OL}	Output Low Voltage (IOL=4mA)			0.4	V
V_{OH}	Output High Voltage (IOH=4mA)	2.4			V
C_{IN}	Input pin capacitance			10	pF
I_{DD}	Supply current		50		mA
I_{SUS}	Suspend current (D+1.5KΩ)			300	uA

7. Recommended Operating Conditions

Symbol	Parameter	Min.	Typical	Max.	Units
V_{CC33}	Power Supply Voltage	3.0	3.3	3.3	V
V_{IN}	Input Voltage	0	Vcc	Vcc + 0.3	V
V_{CC25}	Internal Power Support	2.25	2.50	2.75	V

8. Pin Assignments

Pin No.	Pin Name	Function
1	VCC	USB power input
2	USB D-	USB differential signal
3	USB D+	The pairs are used to transmit Data/Address/Command
4	VSS	Ground

Pin 2   Pin 3

Pin 1   Pin 4
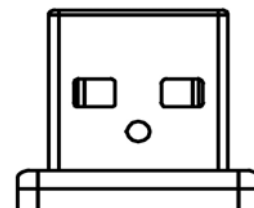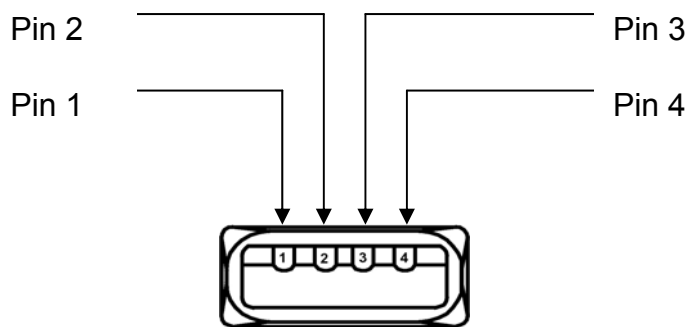
9. Physical Specifications

9.1 Dimensions:
9.1.1 Height: 58.8.mm
9.1.2 Width: 17.6mm
9.1.3 Depth: 9.3mm
9.1.4 Weight: 9g ± 1g

9.2 Outline of top view