

**Intelligent Stick™ 2.0 Plus**  
**BD03 Series**

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## Revision History

Revision	Date	History	Remark
A.0	09/08 '06	New Creation	

- Important!! Please make sure the driver matches the part number on your pen drive before you download.
- Software AP System Requirements. One of following operation systems: Windows 98/98SE/Windows ME/Windows 2000/Windows XP
- The advertised memory capacity of this device represents unformatted capacity. Please note that once formatted and due to variations in flash module block limitations, the functional storage space will be lower than the advertised capacity.
- "PQI reserves the right to make changes without notification when fit, form, function, quality and reliability are not affected. The data sheets do not constitute contract documents and should not be considered part of the specification for purposes of any warranty."

# Intelligent Stick™

## 1. Introduction to Intelligent Stick™ 2.0 Plus

The **Intelligent Stick Pro 2.0 Plus** is a PQI patented technology. It combines characteristics of a flash card and a USB flash drive. It does not need a card reader to read from or write to thus making it the perfect storage medium for all types of digital devices. PQI's Intelligent Stick consumes minimum power and its minute dimensions makes it easy to store. For added value, it also comes with password security, partitioning software and USB boot applications.

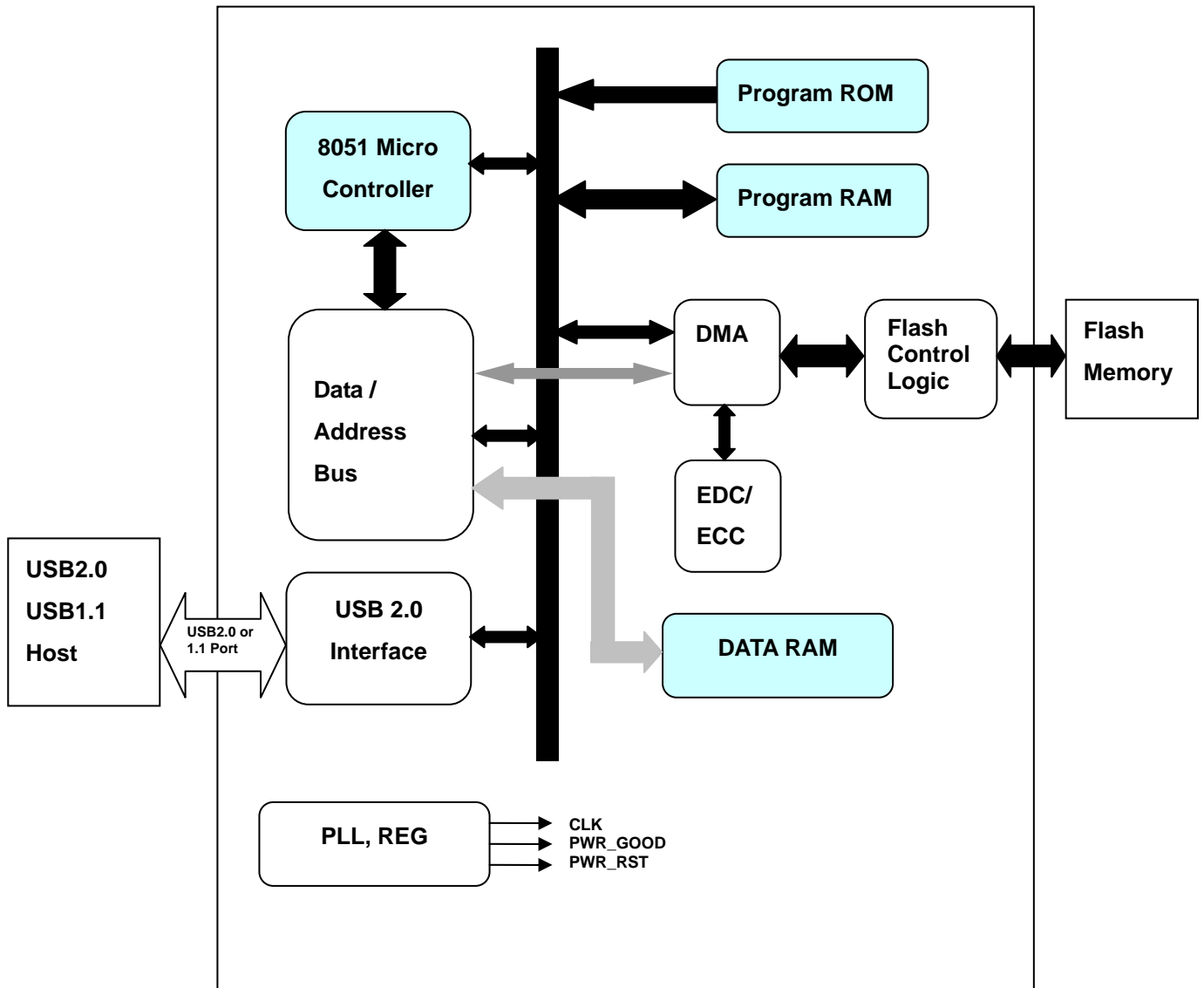
## 2. Main Features Overview

1. PQI's patented Intelligent Stick™ interface USB 2.0 compatible
2. Multimedia or Data Storage
3. Hot swappable, USB Plug & Play compatible
4. Low power consumption
5. Its small size making it easy to carry and store
6. Bundled software downloadable from PQI website : security and partition software
7. Carrying caddy for easy storage in your wallet

## 3. Hardware Specifications

<b>USB Interface</b>	High-speed USB 2.0 interface; backward compatible with USB 1.1	
<b>NAND Flash Interface</b>	Integrated ECC circuits for 4-bit error correction	
<b>OS Support</b>	No drive is required for Windows ME, 2000, XP or Mac OS 9.x	
<b>Environment</b>		
Temperature	Operating	0°C to 65°C
	Non-Operating	-20°C to 75°C
Vibration	Operating	0.2G
	Non-Operating	15G
Shock resistant	Operating	150G
	Non-Operating	1000G
<b>Configuration</b>		
Capacity		128MBytes ~ 2GBytes
<b>Reliability</b>		
MTBF(@25°C)		1,000,000 hours
<b>Power Requirement</b>		
Voltage		DC 3.3/5V ± 10%
<b>Power Consumption</b>		
Read		<100mA
Write		<100mA
Standby		<75mA
Un-configuration		<75mA
Suspend		<0.5mA

4. Block Diagram



5. Absolute Maximum Ratings

Symbol	Parameter	Min	Max	Unit
Tstorage	Storage Temperature	-20	75	°C
Ta	Ambient Operating Temperature	0	65	°C
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

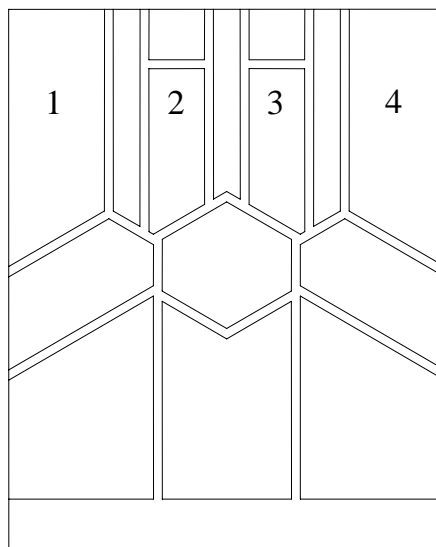
Symbol	Parameter	Min.	Max.	Unit	Notes
VDD	Power Supply	3	3.3	3.6	
VIH	Input Voltage	0.9 X VDD	--	5	
VIL	Input Voltage	-0.3	--	0.2 X VDD	
VOH	Output Voltage	VDD – 0.4	--	--	
VOL	Output Voltage	--	--	0.4	
ILK	Input leakage current	-1	--	1	
IRW	Working Current	--		--	
IOH	IO output current	--	4	--	
IOL	IO output current	--	4	--	
VIH	Input Voltage	0.9 X VDD	--	5	

## 7. Recommended Operating Conditions

Symbol	Parameter	Min.	Typical	Max.	Units
Vcc33	Power Supply Voltage	3.0	3.3	3.3	V
Vin	Input Voltage	0	Vcc	Vcc+0.3	V
Vcc25	Internal Power Support	2.25	2.5	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



## 9. Physical Specifications

### 9.1 Dimensions:

9.1.1 Height: 43mm

9.1.2 Width: 18mm

9.1.3 Depth: 2.8mm

9.1.4 Weight:  $2.7g \pm 0.5g$

### 9.2 Outline of top view

