BTCFI110-XXG
Industrial CompactFlash™ Card Series

Overview

Bigboy BTCFI110 series is CompactFlash™ Storage Card based on Flash memory controller technology.

This card complies with CompactFlash™ specification; it is suitable for the usage of data storage memory for PC or other electric equipment and digital still camera. This card is equipped with NAND flash memory. The Host system which is connected to Industrial CompactFlash™ Storage Card should meet system requirements at minimum. The CFC setting to Fixed or Removable mode will no any function different or issue. Another innovative design feature is worth mention is ”Power Shield”, when a suddenly power failure can protect the integrity of the data write.

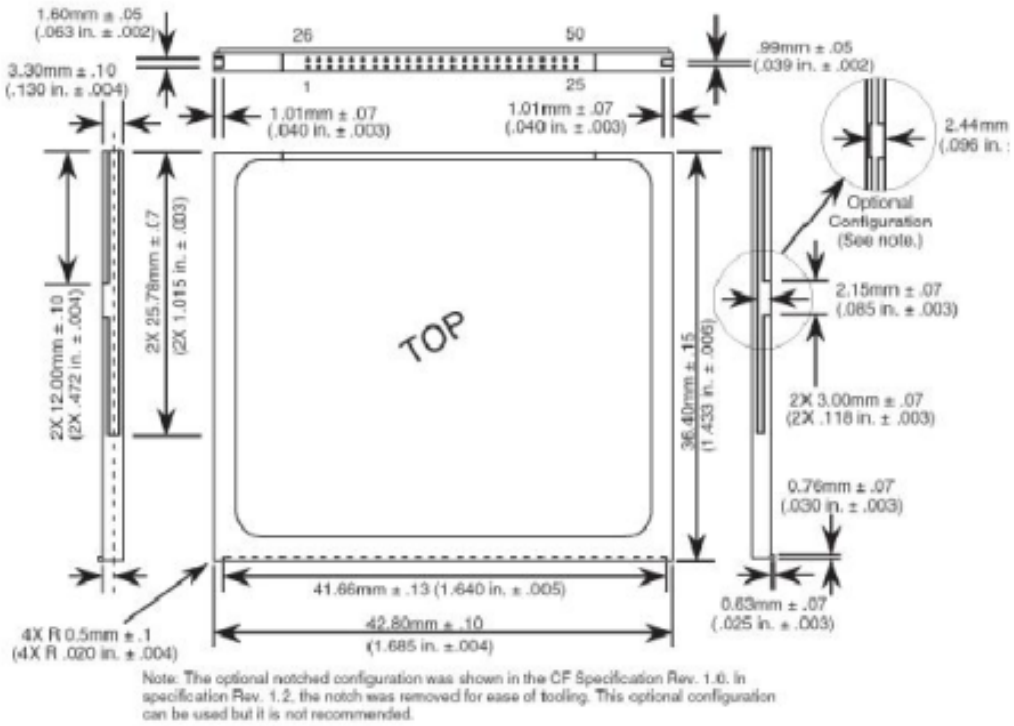
Features

- CompactFlash specification: CF 6.0, PCMCIA ver.2.1 and PC Card ATA ver.2.01 compatible
- Excellent Power Shield function, when a suddenly power failure can protect the integrity of the data write
- Stable delta value by erase count increase
- High reliability based on internal ECC (Error Correcting Code) Function.
- Adjustable delta value
- Wear-leveling support

Specifications

- **Model :** BTCFI110
- **Capacity :** 128MB, 256MB, 512MB, 2GB, 1GB, 2GB, 4GB, 8GB, 16GB, 32GB, 64GB, 128GB
- **Interface :** Memory Card Mode. I/O Card Mode. True-IDE Mode.
- **Connector :** 50pin SMT connector and (3.3mm).
- **Form Factor :** CompactFlash™ Type I
- **NAND Flash Type :** MLC
- **Transfer Mode :** True IDE Mode supports:
  Ultra DMA Modes: 0, 1, 2, 3, 4, 5,6 and 7.
  PIO Modes: 0, 1, 2, 3, 4, 5, and 6.
  Multi-Word DMA Modes 0, 1, 2, 3 and 4.
- **Read Speed (Max.) :** Single Channel - Up to 68.0 MB/sec, Dual Channel - Up to 100.0 MB/sec
- **Write Speed (Max.) :** Single Channel - Up to 25.0 MB/sec, Dual Channel - Up to 50.0 MB/sec
  *Speed may vary due to host hardware, software, usage, and storage capacity.
- **ECC Engine :** Built-in ECC (Error Correction Code) functionality
- **Operating Temperature (°C) :** Normal Temp - 0 to 70 ℃, Wide-Temp : -40 to 85 ℃ .
- **Storage Temperature (°C) :** -55 to 95 ℃
- **Relative Humidity (non-condensing)**
  Operating : 30 ℃ Max. wet bulb temp – 8% ~ 95%
  Non-Operating : 30 ℃ Max. wet bulb temp – 8% ~ 95%
- **Shock :** 1000 G Max. Operating and Non-Operating
- **Vibration :** 15G peak to peak Max. Operating and Non-Operating
- **Operating Voltage :** 3.3 V / 5.0 V ± 5% single power supply operation.
- **Power Consumption (Max.) :** Active – 1.25V, Standby – 0.6V
- **Dimension (L x W x H) :** 36.4 x 42.8 x 3.3 mm
- **Endurance :** 100,000 erase/program cycles (SLC flash)
- **MTBF :** 2,000,000 hours
- **Warranty :** 2-year Limited Warranty

Physical Dimensions



Length	36.40 ± 0.15 mm (1.433 ±.006 in)
Width	42.80 ± 0.10 mm (1.685 ±.004 in)
Thickness	3.3 mm ± 0.10 mm (.130 ±.004 in) (Excluding Lip)
Weight	11.4 g (.40 oz) typical, 14.2 g (.50 oz) maximum

Product specifications are subject to change without notice. Pictures shown may differ from actual products. Total accessible capacity varies depending on operating environment. Due to the diversity and complexity of industrial applications, Bigboy cannot guarantee 100% compatibility with all platforms and under all usage scenarios. For specific applications and environments, please contact Bigboy representative.

Card Pin Assignment

Pin No.	Memory card mode		I/O card mode		True IDE mode			
					PIO mode		Multi-word DMA mode	
	Signal name	I/O	Signal name	I/O	Signal name	I/O	Signal name	I/O
1	GND	–	GND	–	GND	–	GND	–
2	D3	I/O	D3	I/O	D3	I/O	D3	I/O
3	D4	I/O	D4	I/O	D4	I/O	D4	I/O
4	D5	I/O	D5	I/O	D5	I/O	D5	I/O
5	D6	I/O	D6	I/O	D6	I/O	D6	I/O
6	D7	I/O	D7	I/O	D7	I/O	D7	I/O
7	-CE1	I	-CE1	I	-CS0	I	-CS0	I
8	A10	I	A10	I	A10	I	A10	I
9	-OE	I	-OE	I	-ATASEL	I	-ATASEL	I
10	A9	I	A9	I	A9	I	A9	I
11	A8	I	A8	I	A8	I	A8	I
12	A7	I	A7	I	A7	I	A7	I
13	VCC	–	VCC	–	VCC	–	VCC	–
14	A6	I	A6	I	A6	I	A6	I
15	A5	I	A5	I	A5	I	A5	I
16	A4	I	A4	I	A4	I	A4	I
17	A3	I	A3	I	A3	I	A3	I
18	A2	I	A2	I	A2	I	A2	I
19	A1	I	A1	I	A1	I	A1	I
20	A0	I	A0	I	A0	I	A0	I
21	D0	I/O	D0	I/O	D0	I/O	D0	I/O
22	D1	I/O	D1	I/O	D1	I/O	D1	I/O
23	D2	I/O	D2	I/O	D2	I/O	D2	I/O
24	WP	O	-IOIS16	O	-IOIS16	O	-IOIS16	O
25	-CD2	O	-CD2	O	-CD2	O	-CD2	O
26	-CD1	O	-CD1	O	-CD1	O	-CD1	O
27	D11	I/O	D11	I/O	D11	I/O	D11	I/O
28	D12	I/O	D12	I/O	D12	I/O	D12	I/O
29	D13	I/O	D13	I/O	D13	I/O	D13	I/O
30	D14	I/O	D14	I/O	D14	I/O	D14	I/O
31	D15	I/O	D15	I/O	D15	I/O	D15	I/O
32	-CE2	I	-CE2	I	-CS1	I	-CS1	I
33	-VS1	O	-VS1	O	-VS1	O	-VS1	O
34	-IORD	I	-IORD	I	-IORD	I	-IORD	I
35	-IOWR	I	-IOWR	I	-IOWR	I	-IOWR	I
36	-WE	I	-WE	I	-WE	I	-WE	I
37	RDY/-BSY	O	-IREQ	O	INTRQ	O	INTRQ	O
38	VCC	–	VCC	–	VCC	–	VCC	–
39	-CSEL	I	-CSEL	I	-CSEL	I	-CSEL	I
40	-VS2	O	-VS2	O	-VS2	O	-VS2	O
41	RESET	I	RESET	I	-RESET	I	-RESET	I
42	-WAIT	O	-WAIT	O	IORDY	O	IORDY	O
43	-INPACK	O	-INPACK	O	RFU	O	DMARQ	O
44	-REG	I	-REG	I	RFU	I	-DMACK	I
45	BVD2	I/O	-SPKR	I/O	-DASP	I/O	-DASP	I/O
46	BVD1	I/O	-STSCHG	I/O	-PDIAG	I/O	-PDIAG	I/O
47	D8	I/O	D8	I/O	D8	I/O	D8	I/O
48	D9	I/O	D9	I/O	D9	I/O	D9	I/O
49	D10	I/O	D10	I/O	D10	I/O	D10	I/O
50	GND	–	GND	–	GND	–	GND	–