



HDFD-0850

3U CompactPCI Mass Storage Card

Specification Document

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Document Revision Control

Revision	Comment	BY	Date
E0	Initial	RH	09/15/99
E1.0	Correct connector location, add silk designation	RH	09/29/99
E2.0	Add additional power lines from SBS SBC	RH	12/17/99
E2.1	Review and correction	JR	03/10/00
E3.0	Upgrade format and p/n	DG	08/10/01
E3.1	Update document format and product revisions	TJ	08/30/01

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I. Introduction

This document describes the specifications and functionality of the cPCI 3U Mass Storage card. The board will provide Mass Storage capabilities to a cPCI Single Board Computer (SBC) with an on board IDE HD and connection to an External FD.

The board will have two interfacing options:

1. Daughter card option– connected directly to the SBC via 2 Header connectors (40 pin and 34 pins).
2. Stand alone cPCI using J1 and J2 connectors.

The board form factor, physical dimension and BUS interface comply with Compact PCI Specification PICMG 2.0 R2.1.

II. Ordering Information

Part No.	Description
AS00850-x2	Mass storage card
AS00850-x3	Mass storage card with J1 connector
AS00850-x4	Mass storage card with internal floppy drive connector
AS00850-x5	Mass storage card with internal floppy drive and IDE connector

NOTE: x – hard drive option
0 - 6 GB or greater hard drive
1 - no hard drive

Accessories

Part No.	Description
AS00042-01	Floppy drive, data cable, power cable
AS00041-01	Floppy drive, data cable, power cable, mezzanine HDFD card

III. Specifications

A. Physical Specifications

Criteria	Specifications
PCB Dimensions	100MM (3.9370") Height X 160MM (6.2992") Depth X 1.6MM (0.0629") Thickness
Form Factor	Plug in Eurocard, 3U Height, 8 HP Width (1 slot), IEEE (1101.1, 101.10 and P1101.11)
Rear Connectors (optional)	Metric 2.0mm grid, female connector type A is used for J1 (cPCI BUS) and J2 (Signal distribution).
Front Panel	128.5mm Height X 20.32mm Depth X 2.5 mm Thickness.

B. Functional Specifications

Criteria	Specifications
BUS interface	5V and +12V for HD and FD power
Front Panel Indicators:	5V power OK, +12V Power OK, HD Access
Front Panel Connectors	FD Interface

C. Power Specification

Criteria	Specification
Digital Section Power Supply	+5VDC, +12VDC from J1 or from on board connector. 5V for the Hard drive from SBC

D. J1 Signals

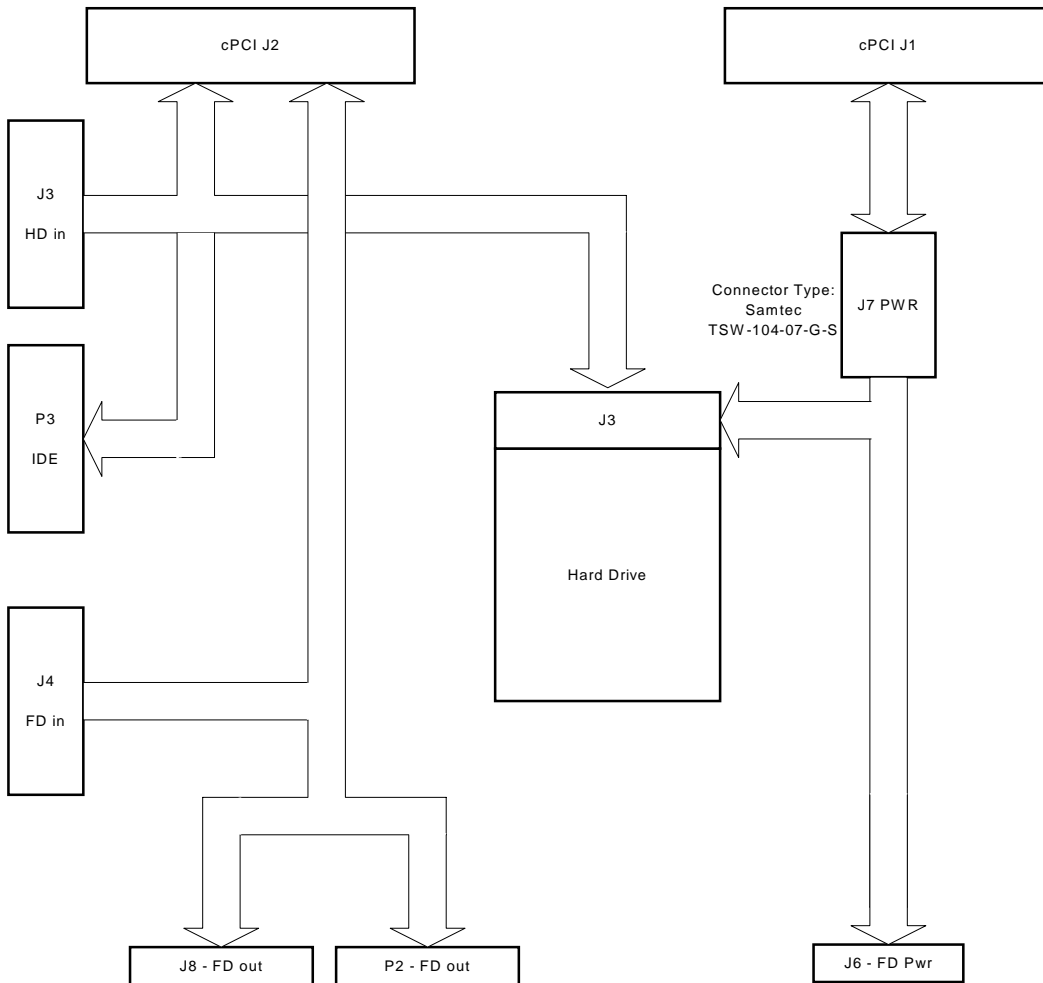
	Z	A	B	C	D	E	F
25	GND	5V	-12V		+12V	5V	GND
24	GND		5V				GND
23	GND				5V		GND
22	GND		GND				GND
21	GND						GND
20	GND		GND				GND
19	GND				GND		GND
18	GND		GND				GND
17	GND				GND		GND
16	GND		GND				GND
15	GND				GND		GND
14	GND						GND
13	GND						GND
12	GND						GND
11	GND				GND		GND
10	GND		GND				GND
9	GND				GND		GND
8	GND		GND				GND
7	GND				GND		GND
6	GND		GND				GND
5	GND				GND		GND
4	GND		GND				GND
3	GND				5V		GND
2	GND		5V				GND
1	GND	5V			5V	5V	GND

E. J2 Signals

	Z	A	B	C	D	E	F
22	GND	Reserved	Reserved	Reserved	Reserved	Reserved	GND
21	GND	Reserved	Reserved	Reserved	Reserved	Reserved	GND
20	GND		GND			GND	GND
19	GND	DD0	GND			FDSKCHG -	GND
18	GND	DD1	GND			FDENSEL -	GND
17	GND	DD2	GND			FINDEX-	GND
16	GND	DD3	GND			FMT0-	GND
15	GND	DD4	RESET			FDS2-	GND
14	GND	DD5	CS1-			FDS1-	GND
13	GND	DD6	CS0-			FMT1-	GND
12	GND	DD7	DA02			FDIRC-	GND
11	GND	DD8	DA01			FSTEP-	GND
10	GND	DD9	DA00			FWD-	GND
9	GND	DD10	INTRQ			FEW-	GND
8	GND	DD11	DMACK-			FTK-	GND
7	GND	DD12	IORDY			FWP-	GND
6	GND	DD13	DIOR-			FRD-	GND
5	GND	DD14	DIOW-			FHS-	GND
4	GND	DD15	DMARQ		(Spare)	Reserved	GND
3	GND	Reserved	Reserved	Reserved	Reserved	Reserved	GND
2	GND	Reserved	Reserved	Reserved	Reserved	Reserved	GND
1	GND				5V	5V	GND

IV. Functionality

A. HDFD-0850 Block Diagram



V. Product Revisions

Part No.	Rev	Functional Change	Reason
AS00850-x2	E1	Initial	N/A
AS00850-x2*	E2	J7 connector added	Power from SBC
AS00850-x2*	E3	Functionality same as E2	PCB support for J8 FD
AS00850-x3	E1	Initial	N/A
AS00850-x3*	E2	Functionality same as E1	N/A
AS00850-x3*	E3	Functionality same as E1	PCB support for J8 FD
AS00850-x4	E1	Initial	N/A
AS00850-x4*	E2	Functionality same as E1	Mounting holes to support FDD
AS00850-x4*	E3	Functionality same as E1	PCB support for P3 IDE
AS00850-x5*	E1	Initial	N/A

* Current revision

NOTE: x – hard drive option
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1 - no hard drive

VI. Warranty

Tenta Technology warrants the original purchaser for two years from the date of delivery for any defect in the product, material or workmanship. Product should be used in suitable installation environment and for the purposes it was designed. Any damages caused by natural disasters such as: fire, flood, wind and lightning are not covered. For more information, please contact Tenta Technology customer support (see locations on front page). Tenta Technology hardware and software are not intended for use in any manner when human life or safety is at risk and not for use in life support equipment.