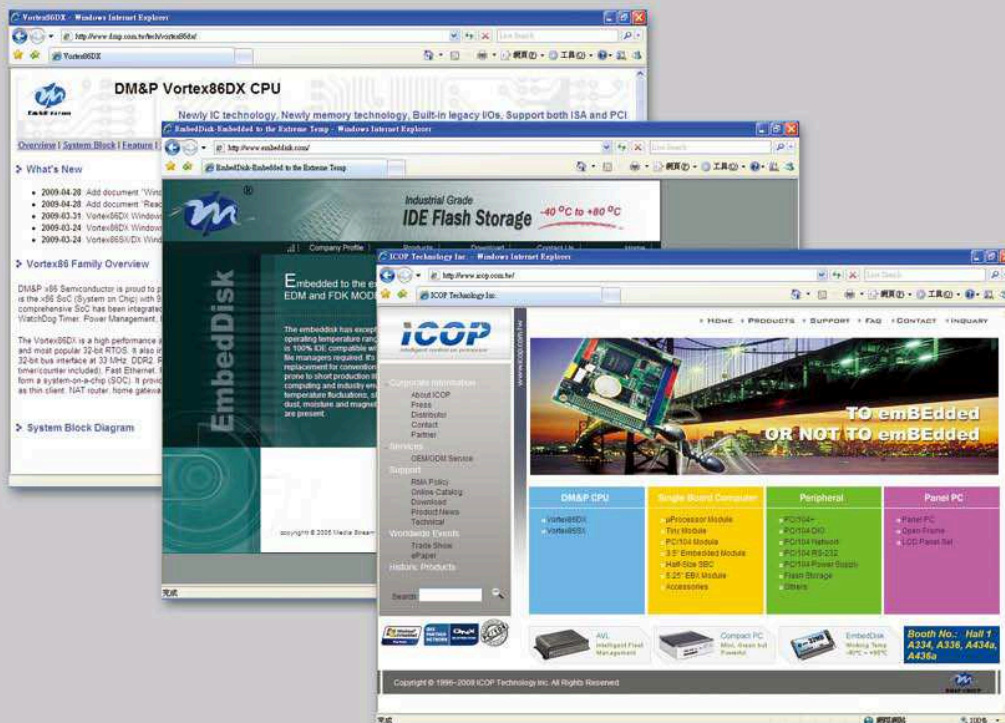


Accessories & Technical Information

8



	Accessory Cable	108
	Pin Definition	110
	EmbedDisk	112
	Global Sales and Technical Service Website.....	115

Accessory Cable



PS2 KB White

Description	2.0mm PS2 Mouse or Keyboard Cable
Specification	2.0mm 6-pin Female Mini-DIN connector to 2.0mm 5-pin Female MPC2 connector
Cable Length	30cm (12 inches)



PS2 KB (TEST) Black

Description	2.54mm PS2 Mouse, Dupont Connector
Specification	2.54mm 6-pin Female Mini-DIN connector to 2.0mm 5-pin Female JCT connector (2-pin connection only), include two Philips type screw and nut
Cable Length	30cm (12 inches)



AT BUS

Description	AT-Bus HDD & FDD Flat Ribbon Cable
Specification	2.54mm 40-pin Socket connector to 2.54mm 40-pin Socket connector & 2.54mm 34-pin Socket connector to 2.54mm 34-pin Socket connector
Number of connectors available	3x 40-pin Socket connector for HDD connections & 3x 34-pin Socket connector for FDD connections
Cable Length	AT-Bus HDD Cable at 45cm (17.7 inches) & AT-Bus FDD Cable at 50cm (19.6 inches)



PRINT

Description	2.54mm PRINTER Flat Ribbon Cable
Specification	2.54mm 26-pin Socket connector to 25-pin Female D-Sub connector
Cable Length	30cm (12 inches)



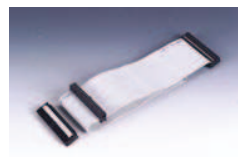
PRINT (2.0)

Description	2.0mm PRINTER Flat Ribbon Cable
Specification	2.0mm 26-pin Socket connector to 25-pin Female D-Sub connector
Cable Length	30cm (12 inches)



PRINT+F

Description	2.54mm PRINTER Flat Ribbon Cable
Specification	2.54mm 26-pin Socket connector to 25-pin Female D-Sub connector on a I/O Bracket
Bracket Length	12cm/4.72 inches
Cable Length	30cm (12 inches)



HDD

Description	2.54mm HDD Flat Ribbon Cable
Specification	2.54mm 40-pin Socket connector to 2.54mm 40-pin Socket connector
Number of connectors available	3 x 40-pin Socket connector for HDD connections
Cable Length	45cm (17.7 inches)



HDD 44P (2.0)

Description	2.54mm HDD Flat Ribbon Cable
Specification	2.0mm 44-pin Socket connector + 5.25" Molex Plug for Power source to 2.54mm 40-pin Socket connector
Cable Length	19 cm (7.48 inches)



Audio (2.0)

Description	3.50 Phone Jack Cable
Specification	2.0mm PH-4P to 3.50 Phone Jack Cable for MIC & SOUND
Cable Length	17cm (6.69inches)



HDD 44P*3 (52CM)

Description	2.0mm HDD Flat Ribbon Cable
Specification	2.0mm 44-pin Socket connector to 2.0mm 44-pin Socket connector
Number of connectors available	3 x 44-pin Socket connector for HDD connections
Cable Length	52cm (20.47 inches)



FDD (2.0)

Description	2.0mm FDD Flat Ribbon Cable
Specification	2.0mm 34-pin Socket connector to 2.54mm 30-pin Socket connector
Cable Length	32 cm (12.59 inches)



RS232

Description	2.54mm RS232 Flat Ribbon Cable
Specification	2.54mm 10-pin Socket connector to 9-pin Male D-Sub connector
Cable Length	30 cm (12 inches)



RS232 (2.0)

Description	2.0mm RS232 Flat Ribbon Cable
Specification	2.0mm 10-pin Socket connector to 9-pin Male D-Sub connector
Cable Length	30 cm (12 inches)



VGA

Description	2.54mm VGA Flat Ribbon Cable
Specification	2.54mm 10-pin Socket connector to 15-pin Female High Density D-Sub connector
Cable Length	32 cm (12.59 inches)



USB (2.54)

Description	2.54mm USB Connector
Specification	2.54mm 10-pin Socket connector to Two USB 4-pin Female Series A Receptacle on a I/O Bracket
Bracket Length	12cm/4.72 inches
Cable specification	4-wire, AWG28, double shielded
Cable Length	31cm (12.2 inches)



NET 4 x 2 (2.0)

Description	2.0mm Ethernet LAN Flat Ribbon Connector
Specification	2.0mm 8-pin Socket connector to RJ-45 Socket 8P8C
Cable specification	4-wire, AWG28, shielded
Cable Length	17cm (6.69 inches)



GPIO (2.0)

Description	2.0mm GPIO AWG24
Specification	2.0mm 20-pin Socket connector to Open wires 20-wire
Cable specification	20-wire, AWG24, unshielded
Cable Length	15cm (5.9 inches)



YKB

Description	PS/2 Mouse & Keyboard Y-Cable
Specification	2.0mm 6-pin Male Mini-DIN connector to Two 2.0mm 6-pin Female Mini-Din connector
Cable Length	19.5cm (7.67 inches)

1

µProcessor Module

2

Mity/Tiny CPU Module

3

PC/104 CPU Module

4

Half-Size CPU Module

5

3.5" CPU Module

6

Peripheral Module

7

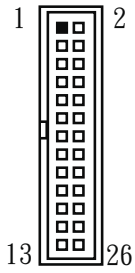
Display Product Series

8

Accessories & Technical Information

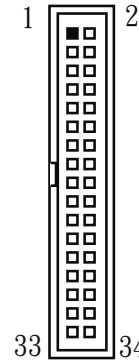
Pin Definition

2.0mm 26-pin box header for Printer



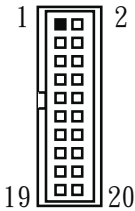
Pin #	Signal Name	Pin #	Signal Name
1	STB-	14	AFD-
2	PD0	15	ERR-
3	PD1	16	PRINIT-
4	PD2	17	SLIN-
5	PD3	18	GND
6	PD4	19	GND
7	PD5	20	GND
8	PD6	21	GND
9	PD7	22	GND
10	ACK-	23	GND
11	BUSY	24	GND
12	PE	25	GND
13	SLCT	26	NC

2.0mm 34-pin box header for FDD



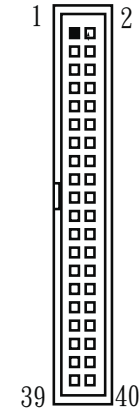
Pin #	Signal Name	Pin #	Signal Name
1	GND	2	DENSEL
3	GND	4	NC
5	GND	6	NC
7	GND	8	INDEX\
9	GND	10	MTR0\
11	GND	12	DS1\
13	GND	14	DS0\
15	GND	16	MTR1\
17	GND	18	DIR\
19	GND	20	STEP\
21	GND	22	WD\
23	GND	24	WG\
25	GND	26	TRO\
27	GND	28	WP\
29	GND	30	RD\
31	GND	32	HDSSEL\
33	GND	34	DSKCHG\

2.0mm 20-pin box header for 16-bit GPIO



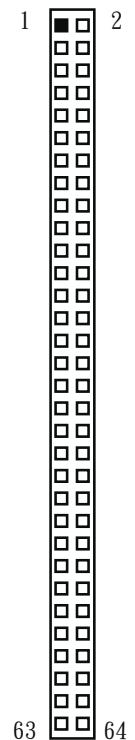
Pin #	Signal Name	Pin #	Signal Name
1	GND	2	VCC
3	GP0	4	GP8
5	GP1	6	GP9
7	GP2	8	GP10
9	GP3	10	GP11
11	GP4	12	GP12
13	GP5	14	GP13
15	GP6	16	GP14
17	GP7	18	GP15
19	VCC	20	GND

2.54mm 40-pin box header for IDE



Pin #	Signal Name	Pin #	Signal Name
1	IDERST-	2	GND
3	IDED7	4	IDED8
5	IDED6	6	IDED9
7	IDED5	8	IDED10
9	IDED4	10	IDED11
11	IDED3	12	IDED12
13	IDED2	14	IDED13
15	IDED1	16	IDED14
17	IDED0	18	IDED15
19	GND	20	VCC
21	N/C	22	GND
23	IDEIOW	24	GND
25	IDEIOR	26	GND
27	N/C	28	N/C
29	N/C	30	GND
31	IDEIQR14	32	IOCS16
33	IDESA1	34	N/C
35	IDESA0	36	IDESA2
37	HDCS-0	38	HDCS-1
39	IDELED	40	GND

2.0mm/2.54mm 64-pin x-ISA socket



Pin #	Signal Name	Pin #	Signal Name
1	GND	2	SBHE
3	RSTDRV	4	SD7
5	VCC	6	SD6
7	SD8	8	SD5
9	SD9	10	SD4
11	SD10	12	SD3
13	SD11	14	SD2
15	SD12	16	SD1
17	SD13	18	SD0
19	GND	20	IOCHRDY
21	SMEMW	22	AEN
23	SMEMR	24	SA19
25	IOW	26	SA18
27	IOR	28	SA17
29	SD14	30	SA16
31	SD15	32	SA15
33	MEMCS16	34	SA14
35	IOCS16	36	SA13
37	REFRESH	38	SA12
39	SYSCLK	40	SA11
41	IRQ7	42	SA10
43	IRQ6	44	SA9
45	IRQ5	46	SA8
47	IRQ4	48	SA7
49	IRQ3	50	SA6
51	IRQ10	52	SA5
53	IRQ11	54	SA4
55	BALE	56	SA3
57	VCC	58	SA2
59	OSC	60	SA1
61	GND	62	SA0
63	IRQ12	64	IRQ14

PCI 104 Bus Signal Assignments



Pin	A	B	C	D
1	GND	NC	+5V	AD00
2	V I/O	AD02	AD01	+5V
3	AD05	GND	AD04	AD03
4	C/BE0	AD07	GND	AD06
5	GND	AD09	AD08	GND
6	AD11	V I/O	AD10	GND
7	AD14	AD13	GND	AD12
8	+3.3V	C/BE1	AD15	+3.3V
9	SERR	GND	SBO	PAR
10	GND	PERR	+3.3V	NC
11	STOP	+3.3V	LOCK	GND
12	+3.3V	TRDY	GND	DEVSEL
13	FRAME	GND	IRDY	+3.3V
14	GND	AD16	+3.3V	C/BE2
15	AD18	+3.3V	AD17	GND
16	AD21	AD20	GND	AD19
17	+3.3V	AD23	AD22	+3.3V
18	IDSELO	GND	IDSEL1	IDSEL2
19	AD24	C/BE3	V I/O	IDSEL3
20	GND	AD26	AD25	GND
21	AD29	+5V	AD28	AD27
22	+5V	AD30	GND	AD31
23	REQ0	GND	REQ1	V I/O
24	GND	REQ2	+5V	GNT0
25	GNT1	V I/O	GNT2	GND
26	+5V	CLK0	GND	CLK1
27	CLK2	+5V	CLK3	GND
28	GND	INTD	+5V	PCIRST
29	+12V	INTA	INTB	INTC
30	-12V	NC	NC	GND

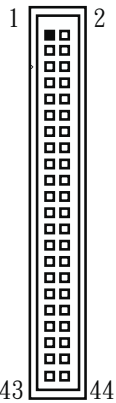
2.54mm 8-pin header for Ethernet



Pin #	Signal Name	Pin #	Signal Name
1	TX+	2	TX-
3	RX+	4	LED0
5	LED0+	6	RX-
7	LED1+	8	LED1

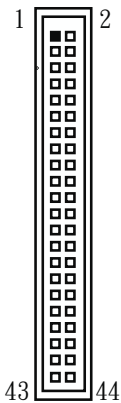
Pin Definition

2.0mm 44-pin LCD box header for Vortex86SX/Vortex86DX series



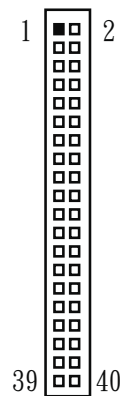
Pin #	Signal Name	Pin #	Signal Name
1	VCC3	2	VCC3
3	LG2	4	LG3
5	LG4	6	LG5
7	NC	8	NC
9	LR0	10	LR1
11	LR2	12	LR3
13	LR4	14	LR5
15	GND	16	NC
17	NC	18	NC
19	NC	20	GND
21	NC	22	NC
23	LB0	24	LB1
25	LB2	26	LB3
27	LB4	28	LB5
29	NC	30	NC
31	LG0	32	LG1
33	GND	34	GND
35	NC	36	LCLK
37	NC	38	LDE
39	NC	40	LHSYNC
41	NC	42	LVSYNC
43	LBACKL	44	LVDDEN

2.0mm 44-pin box header for IDE



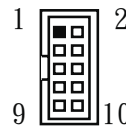
Pin #	Signal Name	Pin #	Signal Name
1	IDERST-	2	GND
3	IDED7	4	IDED8
5	IDED6	6	IDED9
7	IDED5	8	IDED10
9	IDED4	10	IDED11
11	IDED3	12	IDED12
13	IDED2	14	IDED13
15	IDED1	16	IDED14
17	IDED0	18	IDED15
19	GND	20	NC
21	IDEREQ	22	GND
23	IDEIOW-	24	GND
25	IDEIOR-	26	GND
27	ICHRDY	28	GND
29	IDACK-	30	GND
31	IDEIRQ	32	NC
33	IDESA1	34	CBLID
35	IDESA0	36	IDESA2
37	IDECS-0	38	IDECS-1
39	DASP	40	GND
41	VCC	42	VCC
43	GND	44	NC

PC/104 Connector - 40pin Header Connector (CN2)



Pin#	Signal Name	Pin#	Signal Name
1	GND	2	GND
3	MEMCS16 *	4	SBHE *
5	IOCS16 *	6	LA23
7	IRQ10	8	LA22
9	IRQ11	10	LA21
11	IRQ12	12	LA20
13	IRQ15	14	LA19
15	IRQ14	16	LA18
17	DACK0 *	18	LA17
19	DRQ0	20	MEMR *
21	DACK5 *	22	MEMW *
23	DRQ5	24	SD8
25	DACK6 *	26	SD9
27	DRQ6	28	SD10
29	DACK7 *	30	SD11
31	DRQ7	32	SD12
33	VCC	34	SD13
35	MASTER *	36	SD14
37	GND	38	SD15
39	GND	40	NC

2.0mm/2.54mm 10-pin box header for RS-232



Pin #	Signal Name	Pin #	Signal Name
1	DCD1	2	RXD1
3	TXD1	4	DTR1
5	GND	6	DSR1
7	RTS1	8	CTS1
9	RI1	10	NC

2.0mm 4-pin wafer for MIC-in



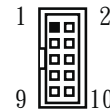
Pin #	Signal Name
1	VREFOUT
2	GND
3	GND
4	MIC1

2.0mm 4-pin wafer for Line-out



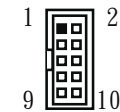
Pin #	Signal Name
1	LOUTR
2	GND
3	GND
4	LOUTL

10-pin box header for VGA



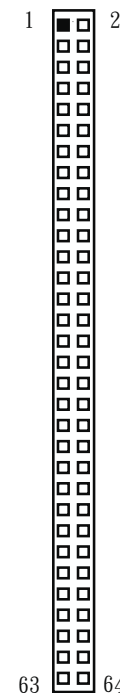
Pin #	Signal Name	Pin #	Signal Name
1	ROUT	2	GND
3	GOUT	4	GND
5	BOUT	6	GND
7	HSYNC	8	GND

2.0mm/2.54mm 10-pin box header for USB



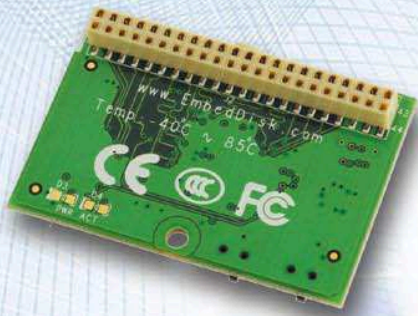
Pin #	Signal Name	Pin #	Signal Name
1	VCC	2	VCC
3	-DATA1	4	-DATA0
5	+DATA1	6	+DATA0
7	GND	8	GND
9	GND	10	GND

PC/104 Connector - 64pin Header Connector (CN1)

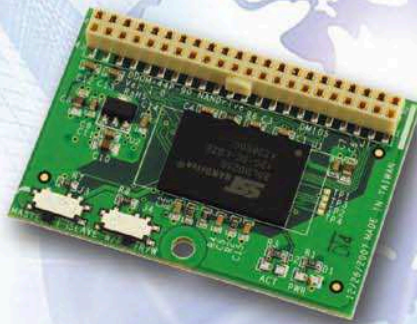


Pin#	Signal Name	Pin#	Signal Name
1	IOCHCK *	2	GND
3	SD7	4	RSTDRV
5	SD6	6	VCC
7	SD5	8	IRQ9
9	SD4	10	-5V
11	SD3	12	DRQ2
13	SD2	14	-12V
15	SD1	16	OWS
17	SD0	18	+12V
19	IOCHRDY	20	GND
21	AEN	22	SMEMW *
23	SA19	24	SMEMR *
25	SA18	26	IOW *
27	SA17	28	IOR *
29	SA16	30	DACK3 *
31	SA15	32	DRQ3
33	SA14	34	DACK1 *
35	SA13	36	DRQ1
37	SA12	38	REFRESH *
39	SA11	40	SYSCLK
41	SA10	42	IRQ7
43	SA9	44	IRQ6
45	SA8	46	IRQ5
47	SA7	48	IRQ4
49	SA6	50	IRQ3
51	SA5	52	DACK2 *
53	SA4	54	TC
55	SA3	56	BALE
57	SA2	58	VCC
59	SA1	60	OSC
61	SA0	62	GND
63	GND	64	GND

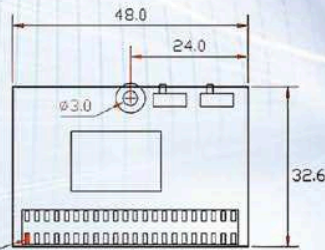
DDOM-SST-44P-H



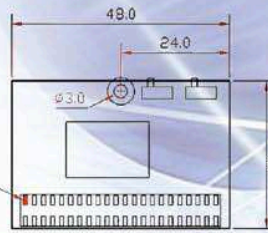
DDOM-SST-44P-HL



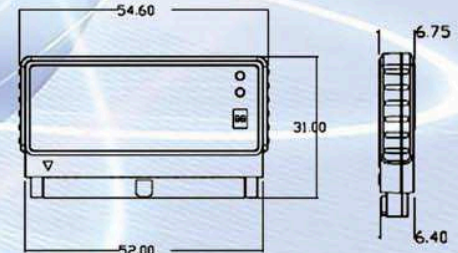
DDOM-SST-44P-V



Pin 1 Left Side
(Type: H)



Pin 1 Right Side
(Type: H-LDF)



Features

- » -40 °C to +85 °C extreme temp range
- » Power & Active LEDs, easy to check work status
- » RoHS Compliant
- » Industrial grade connector, avoid inaccuracy connection
- » Write Protect
- » Low power operation
- » Fixed hole layout
- » Unitized 44 pin IDE
- » ECC for exceptional data reliability
- » Completely solid state – no moving parts
- » Entirely bootable for current embedded O/S
- » 50G operating shock
- » 5G operating vibration
- » 16.6 MB/s burst R/W rate
- » 10 years data integrity

Ordering information

- | | |
|---------------------------|------------------------|
| ★ IDE-2.0mm 44pin | ★ IDE-2.54mm 40Pin |
| DDOM-SST-128MB-4GB-44P-H | IDM-128MB-8GB-40P-H-X |
| DDOM-SST-128MB-4GB-44P-HL | IDM-128MB-8GB-40P-HL-X |
| DDOM-SST-128MB-4GB-44P-V | IDM-128MB-8GB-40P-V-X |

Product Information

• Dependable and secure

Designed with advanced IDE flash controller technology, EmbedDisk is 100% compatible with the standard IDE/ATA storage interface without the need for special device driver. This advanced multi-tasking IDE flash controller's integrated error-detection, error-correction, re-mapping and wear-leveling technologies with power hold-up circuit greatly improves data reliability. Its low-power requirement, advanced PIO modes, multi-sector transfer support and LBA addressing can satisfy application with high performance and reliability requirements.

• Anti Shock & Anti Vibration

Using advanced solid-state storage technology, without moving parts, EmbedDisk is able to perform all of its designated function without being affected by shock and vibration.

• Wide Operating Temperature

EmbedDisk is designed to support commercial and industrial applications operating in environment exposed to extreme temperature range. The EmbedDisk DDOM series supports -40°C to +85°C operating temperature.



EmbedDisk

Wide Temperature -40°C ~ +85°C



Specifications

Item	DDOM-SST-128M~256M	DDOM-SST-512G ~ 4G		
IDE Transfer Mode	PIO Mode 0-4 MwDMA Mode 0-2	PIO Mode -6 MwDMA Mode 4 Ultra DMA Mode-4		
Drive Config.	Switch Master/Slave	Switch Master/Slave		
Protocol Mode	N/A	N/A		
Access Mode	N/A	N/A		
Data Transfer Rate		512M	1G	2G
Read Transfer Rate	>10Mbytes	>17Mbytes	>30Mbytes	>30Mbytes
Write Transfer Rate	>5Mbytes	>5Mbytes	>10Mbytes	>20Mbyte
Burst Transfer Rate	16.6MB/sec.			
Serials Physical				
Bus Interface	ATA Compatibility			
Connector	40/44pin IDE/ATA ANSI Standards			
Storage capacity	128M to 4GB			
Sector Size	512 bytes			
Driver Number	Drive 0 or 1			
Environmental Specification				
Operation Temp.	-45°C~+85°C			
Storage Temp.	-65°C~+150°C			
Humidity	10%~95% non-condensing			
Vibration	5G (7~2000Hz)			
Shock	50G/10ms			
System Reliability				
ECC technology	High Reliability based on the internal ECC function			
MTBF	>3,000,000 hours			
R/W Endurance	2,000,000 times (wear-leveling)			
Data integrity	10 years			
Power requirement				
DC input voltage	+5V single power supply operation			
Power mode	Auto Stand-by and sleep mode			
Power consumption	150mA (max.)			
Physical Specification				
Enclosure Material	PC Mechanical Cover and UL-94			
Dimension	44 pin:48 x 32.6 mm (W x H)			