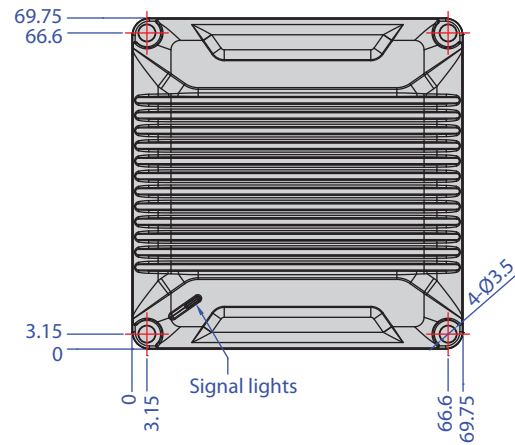
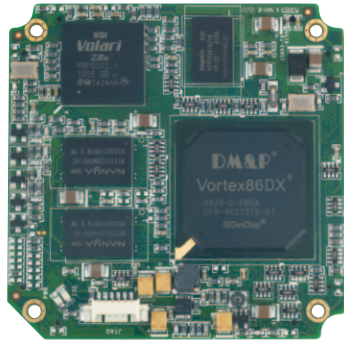


# SOM304RD-VI



Unit: mm

## Specifications

<b>SoC</b>	DM&P SoC CPU Vortex86DX- 800MHz
<b>Cache</b>	L1:16K I-Cache, 16K D-Cache,L2 Cache 256KB
<b>Bus</b>	ISA bus standard compliant
<b>BIOS</b>	AMI BIOS
<b>System Memory</b>	256 / 512MB DDR2 Onboard
<b>Watchdog Timer</b>	Software programmable from 30.5 $\mu$ sec. to 512 sec. x 2 sets (Watchdog 1 fully compatible with M6117D)
<b>VGA</b>	XGI Volari Z9s Chipset VGA and TFT Flat Panel Interface Support Onboard 32MB VGA Memory, support resolution up to 1280x1024, 16M colors
<b>LAN</b>	Integrated 10/100Mbps Ethernet
<b>Flash Disk Support</b>	Onboard 4MB SPI Flash Disk Onboard SST Flash Disk (512MB/1GB/2GB/4GB are Optional) MSTI EmbedDisk Module (16MB and above) 44-pin IDE to Micro SD (Optional)
<b>PWM</b>	24~32 Channels
<b>I2C</b>	Controlled by GP 34/35
<b>Serial Console</b>	Controlled by GP 36/37
<b>I/O interface</b>	Enhanced IDE port (UltraDMA-100/66/33) x1 RS-232 port x5 (TX/RX x1) USB port (Ver2.0) x4 Parallel port x1 16-bit GPIO port x2 10/100Mbps Ethernet port x1
<b>Connector</b>	1.27mm 76-pin box header for signal x4 1.25mm 6-pin wafer for JTAG x1
<b>Power Requirement</b>	Single Voltage +5V @ 620mA
<b>Dimensions</b>	70 (L) x70 (W) x13 (H) mm (With Cover)
<b>Weight</b>	25g
<b>Operating Temperature</b>	-20°C ~ +70°C -40°C ~ +85°C (Optional)

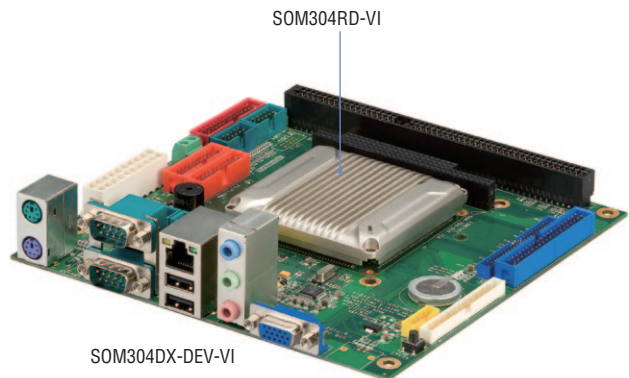
## Packing List

- SOM304RD52VINE1 x1

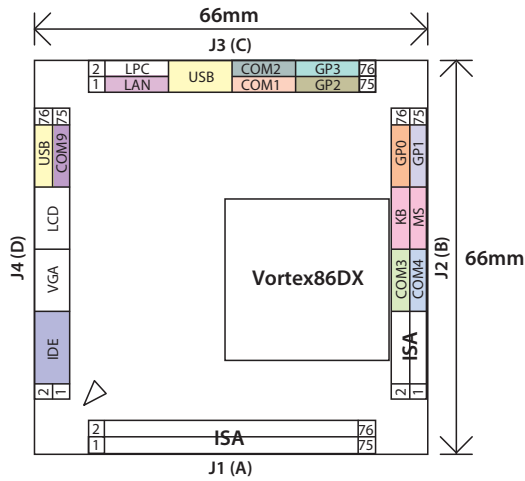
## Ordering Information

- SOM304RD52VINE1** Vortex86DX SOM304 CPU module w/256MB DDR2
- SOM304RD53VINE1** Vortex86DX SOM304 CPU module w/512MB DDR2
- SOM304RD52VIBE1** Vortex86DX SOM304 CPU module w/NAND Flash 512MB,256MB DDR2
- SOM304RD53VIDE1** Vortex86DX SOM304 CPU module w/NAND Flash 2GB,512MB DDR2
- SOM304DX-DEV-VI** SOM304RD-VI Development Board

## SOM304DX-DEV-VI Development Kit



SOM304RD-VI



SOM304RD-VI Signal Assignment

J1(A)		J2(B)		J3(C)		J4(D)									
Pin	Signal Name	Pin	Signal Name	Pin	Signal Name	Pin	Signal Name								
1	GND	2	IOCHCK	1	DRQ6	2	LA17	1	GND	2	GND				
3	RSTDRV	4	SD7	3	DACK7	4	MEMR	3	LAD0	4	MTBF-OUT	3	IDED7	4	IDED8
5	IRQ9	6	SD6	5	DRQ7	6	MEMW	5	LAD1	6	LFRAME-	5	IDED6	6	IDED9
7	DRQ2	8	SD5	7	SD8	8	SD9	7	LAD2	8	LDRQ-	7	IDED5	8	IDED10
9	OWS	10	SD4	9	SD10	10	SD11	9	LAD3	10	SERIRQ	9	IDED4	10	IDED11
11	SMEMW	12	SD3	11	SD12	12	SD13	11	CLK24MOUT	12	PCIRST-	11	IDED3	12	IDED12
13	SMEMR	14	SD2	13	SD14	14	SD15	13	PCICLK1	14	GND	13	IDED2	14	IDED13
15	IOW	16	SD1	15	GPCS0	16	GPCS1	15	GND	16	LINK/ACTIVE	15	IDED1	16	IDED14
17	IOR	18	SD0	17	GND	18	GND	17	LANTX-	18	LANRX-	17	IDED0	18	IDED15
19	DACK3	20	IOCHRDY	19	CTS3\	20	DSR3\	19	LANTX+	20	LANRX+	19	IDEREQ	20	IDECBLID
21	DRQ3	22	AEN	21	DTR3\	22	RXD3\	21	DUPLEX	22	VCC3-OUT	21	IDEIOW	22	IDESA0
23	DACK1	24	SA19	23	RI3\	24	RTS3\	23	GND	24	GND	23	IDEIOR	24	IDESA1
25	DRQ1	26	SA18	25	TXD3\	26	DCD3\	25	USB3-	26	USB2-	25	IDERYD	26	IDESA2
27	REFRESH	28	SA17	27	CTS4\	28	DSR4\	27	USB3+	28	USB2+	27	IDEACK	28	IDEC30
29	GND	30	SA16	29	DTR4\	30	RXD4\	29	USB1-	30	USB0-	29	IDEINT	30	IDEC31
31	SYSCLK	32	SA15	31	RI4\	32	RTS4\	31	USB1+	32	USB0+	31	AIDELED	32	GND
33	IRQ7	34	SA14	33	TXD4\	34	DCD4\	33	GND	34	GND	33	HSYNC	34	BOUT
35	IRQ6	36	SA13	35	PPD0	36	PSTB-	35	CTS2\	36	DSR2\	35	VSYNC	36	ROUT
37	IRQ5	38	SA12	37	PPD1	38	PAFD-	37	DTR2\	38	RXD2\	37	DDCDAT	38	GOUT
39	IRQ4	40	SA11	39	PPD2	40	PERROR-	39	RI2\	40	RTS2\	39	DDCCLK	40	GND
41	IRQ3	42	SA10	41	PPD3	42	PINIT-	41	TXD2\	42	DCD2\	41	GND	42	LBACKL
43	DACK2	44	SA9	43	PPD4	44	PSLIN-	43	TXDEN2	44	TXDEN1	43	LHSYNC	44	LVDEN
45	TC	46	SA8	45	PPD5	46	PACK-	45	CTS1\	46	DSR1\	45	LDE	46	LVSYN
47	BALE	48	SA7	47	PPD6	48	PBUSY	47	DTR1\	48	RXD1\	47	LCLK	48	LG0
49	OSC	50	SA6	49	PPD7	50	PPE	49	RI1\	50	RTS1\	49	LG1	50	LB4
51	MEMCS16	52	SA5	51	GND	52	PSLCT	51	TXD1\	52	DCD1\	51	LB5	52	LB2
53	IOCS16	54	SA4	53	RESET	54	GND	53	GND	54	GND	53	LB3	54	LB0
55	IRQ10	56	SA3	55	MSCLK	56	KBCLK	55	GP30	56	GP31	55	LB1	56	LR4
57	IRQ11	58	SA2	57	MSDATA	58	KBDATA	57	GP32	58	GP33	57	LR5	58	LR2
59	IRQ12	60	SA1	59	VBATT	60	SPEAKER	59	GP34	60	GP35	59	LR3	60	LR0
61	GND	62	SA0	61	GP00	62	GP01	61	GP36	62	GP37	61	LR1	62	LG4
63	IRQ15	64	SBHE	63	GP02	64	GP03	63	GP20	64	GP21	63	LG5	64	LG2
65	IRQ14	66	LA23	65	GP04	66	GP05	65	GP22	66	GP23	65	LG3	66	GND
67	DACK0	68	LA22	67	GP06	68	GP07	67	GP24	68	GP25	67	GND	68	USBIN+
69	DRQ0	70	LA21	69	GP10	70	GP11	69	GP26	70	GP27	69	SYS-FAIL-IN	70	USBIN-
71	DACK5	72	LA20	71	GP12	72	GP13	71	GND	72	GND	71	SYS-FAIL-OUT	72	GND
73	DRQ5	74	LA19	73	GP14	74	GP15	73	VCC	74	KEY1	73	SYS-SW-IN	74	RXD9\
75	DACK6	76	LA18	75	GP16	76	GP17	75	VCC	76	KEY0	75	SYS-GPCS-IN	76	TXD9\