



CPC203 CPU CARD

EuroCard SBC With Pentium MMX™ performance

TECHNICAL SPECIFICATIONS

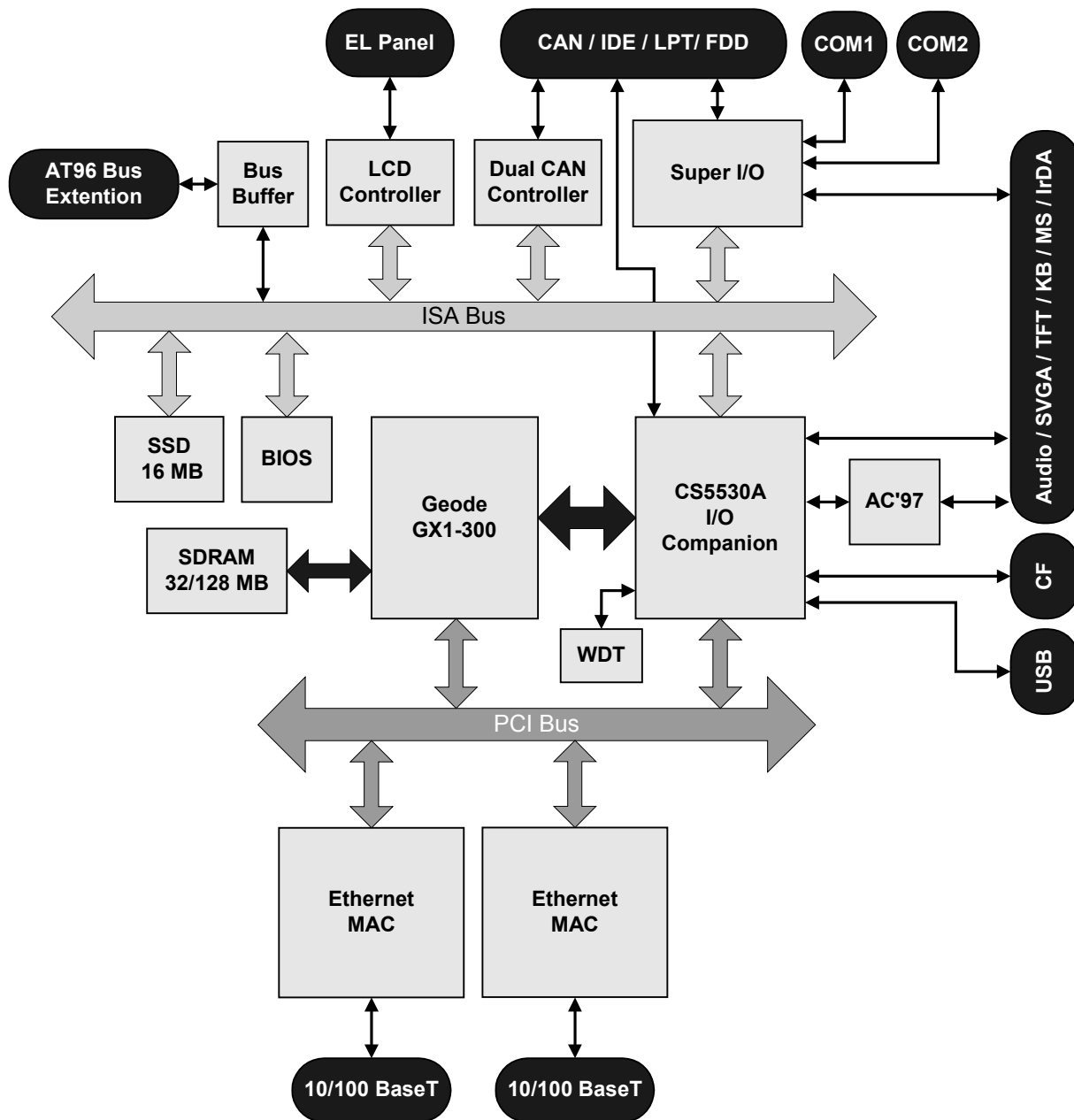
- **Processor:** Geode™ GX1 300 MHz
- **System memory:** SDRAM 32MB/128MB¹
- **GENERAL™ Software Embedded BIOS:**
 - 256 KB in -system modification
 - FastBoot™ feature – BIOS POST and DOS Boot time is less than 1.5 sec.
 - SafeBoot™ feature – backup copy & Watchdog Timer enabled during BIOS POST and DOS Boot
- **Solid state disk:** 16MB w. Fastwel true FFS
- **CF™/ Microdrive™ supports up to 1GB**
- **SVGA Controller:**
 - video memory up to 4 MB
 - CRT monitors resolutions up to 1024x768 @ 16bpp and 1280x1024 @ 256 colors
 - TFT panel supports resolution up to 1280x1024 @ 256 colors
- **LCD Controller (Epson S1D13705):**
 - EL panel supports resolution up to 640x480
 - 4/8-bit monochrome/ color LCD
 - Single-panel, single-drive passive displays
 - Dual-panel, dual-drive passive displays
- **Ethernet Interface:** Dual 10/100Base-T PCI Ethernet Controller
- **Audio Controller:** AC'97 compliant interface
- **Dual CAN controller**
- **USB port**
- **IDE Interface:**
 - support up to two IDE devices
 - Ultra DMA/33 support
- **Floppy Drive Interface:** supports one FDD
- **Parallel port:** multi-mode port (SPP/EPP/ECP)
- **Serial ports:** two COM-ports RS232
 - 115.2 Kbps in 16450 or 16550A mode
 - 15 kV ESD protection (IEC1000-4-2)
- **Keyboard/Mouse PS/2**
- **SEEPROM:** backup copy of CMOS setup in serial EPROM
- **RTC:** Internal RTC with Li battery
- **AT-compatibility:**
 - Two 8259-equivalent interrupt controllers
 - Two 8237-equivalent DMA controllers
 - 8254-equivalent timers
- **Watchdog timer:** fixed time-out 1.6 sec.
- **PC speaker**
- **Operating system support:**
 - Microsoft MS-DOS®, Windows® 2000, 9x, NT, CE
 - QNX®
 - Linux®
- **Console port:**
 - COM1(2) or/and VGA/LCD
 - COM1(2) or/and Keyboard
- **Extension Bus:** AT-96 (16-Bit ISA)
- **Supports SpeedStep™ technology**
- **Power requirements:**
 - +5V ±5% @ 0.6 A (f=133MHz)
 - +5V ±5% @ 1 A (f=300MHz)
- **Operating temperature:** -40°C to +85°C
- **Storage temperature:** -55°C to +95°C
- **Humidity:** 5% to 95%, noncondensing
- **Shock/vibration:** 20g/5g
- **MTBF:** 12 years
- **Size:** 100 mm × 160 mm × 18 mm
- **Front Panel:** 4HP/12HP²



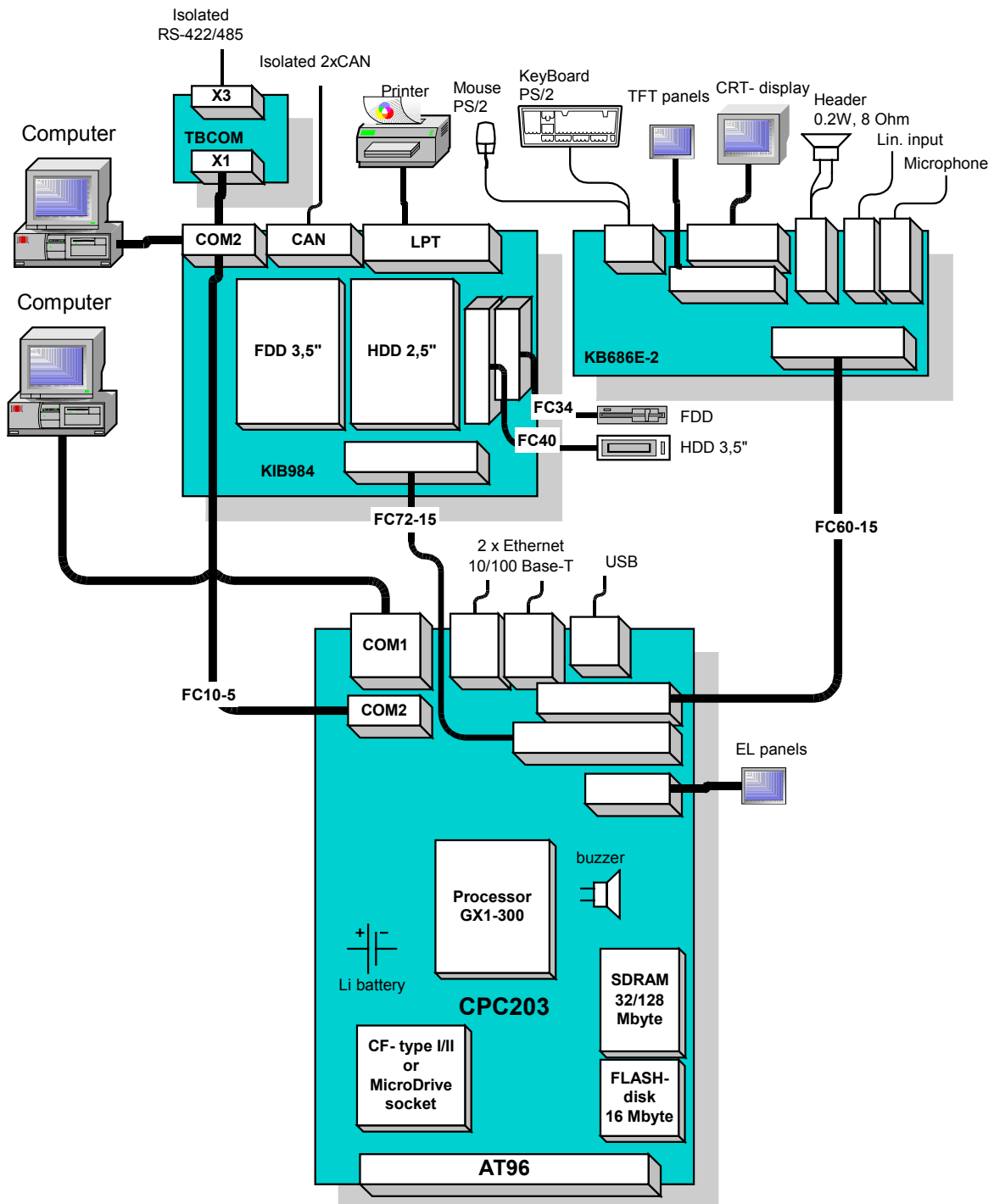
¹ 20302 option

² 20303 option (KIB98101+KIB98401 include)

FUNCTIONAL BLOCK DIAGRAM



CONNECTION DIAGRAM



CONNECTOR'S PINOUT

J1: COM1	
Pin #	Function
1	DCD1
2	DCR1
3	RxD1
4	RTS1
5	TxD1
6	CTS1
7	DTR1
8	RI1
9	GND
10	+5VS1

J2: COM2	
Pin #	Function
1	DCD2
2	DCR2
3	RxD2
4	RTS2
5	TxD2
6	CTS2
7	DTR2
8	RI2
9	GND
10	+5VS1

J4: ETHERNET 10/100 BASE-T			
Pin #	Function	Pin #	Function
1	XMT2+	5	-
2	XMT2-	6	RCV2-
3	RCV2+	7	-
4	-	8	-

J7: USB	
Pin #	Function
1	VCC1
2	DATA1+
3	DATA1-
4	GND1

J5: MS/KBD, TFT, CRT & AUDIO			
Pin #	Function	Pin #	Function
1	KB\$DAT	2	+5V
3	KB\$CLK	4	MS\$CLK
5	GND	6	MS\$DAT
7	+5V	8	+5V
9	FPD0	10	FPD1
11	FPD2	12	FPD3
13	FPD4	14	FPD5
15	GND	16	FPD6
17	FPD7	18	FPD8
19	FPD9	20	FPD10
21	FPD11	22	GND
23	FPD12	24	FPD13
25	FPD14	26	FPD15
27	FPD16	28	FPD17
29	GND	30	FPCLK
31	GND	32	FPDISPEN
33	GND	34	FPHSYNC
35	FPBLKEN	36	FPVSYNC
37	FPVDDEN	38	GND
39	OUTR	40	GND
41	OUTB	42	GND
43	OUTG	44	GND
45	DDCSDA	46	HSYNCB
47	VSYNCB	48	DDCSCL
49	GND	50	VCCAUD
51	LINOUTL	52	GND
53	LINOUTR	54	GND
55	LININL	56	GND
57	LININR	58	GND
59	MICIN	60	GND

J6: IR, LPT, FDD & HDD			
Pin #	Function	Pin #	Function
1	CAN0RxD	2	CAN0TxD
3	CAN1RxD	4	CAN1TxD
5	STB*	6	AFD*
7	Data 0	8	ERR*
9	Data 1	10	INIT*
11	Data 2	12	SLIN
13	Data 3	14	GND
15	Data 4	16	Data 5
17	Data 6	18	Data 7
19	GND	20	ACK *
21	BUSY	22	PE
23	SLCT	24	GND
25	INDEX*	26	MTR0*
27	DR0*	28	DIR*
29	STEP*	30	WDATA*
31	WGATE*	32	TRK0*
33	WP*	34	RDATA*
35	HDSEL*	36	DSKCHG*
37	GND	38	RST*
39	GND	40	D7
41	D8	42	D6
43	D9	44	D5
45	D10	46	D4
47	D11	48	GND
49	D3	50	D12
51	D2	52	D13
53	D1	54	D14
55	D0	56	D15
57	GND	58	DRQ*
59	IOW*	60	GND
61	IOR*	62	GND
63	IORDY	64	ACK*
65	IRQ	66	ADR1
67	ADR0	68	ADR2
69	SLCT0	70	SLCT1
71	+5V	72	+5V

J3: ETHERNET 10/100 BASE-T			
Pin #	Function	Pin #	Function
1	XMT1+	5	-
2	XMT1-	6	RCV1-
3	RCV1+	7	-
4	-	8	-



J8: EL LCD

Pin #	Function	Pin #	Function
1	+12 V	2	+12 V
3	GND	4	GND
5	+5V	6	GND
7	FRAME (VS)	8	GND
9	LINE (HS)	10	GND
11	SHIFT (VCLK)	12	GND
13	DAT4 (VID0)	14	GND
15	DAT5 (VID1)	16	GND
17	DAT6 (VID2)	18	GND
19	DAT7 (VID3)	20	GND
21	DAT0	22	DAT1
23	DAT2	24	DAT3
25	GND	26	DAT8

P1: AT96

Pin #	Function	Pin #	Function	Pin #	Function
A1	GND	B1	SBHE#	C1	IOCHK#
A2	RESET	B2	MEMCS16#	C2	SD7
A3	+5V	B3	SA23	C3	SD6
A4	IRQ9	B4	IOCS16#	C4	SD5
A5	-	B5	SA22	C5	SD4
A6	DRQ2	B6	IRQ10	C6	SD3
A7	-12V	B7	SA21	C7	SD2
A8	OWS#	B8	IRQ11	C8	SD1
A9	+12V	B9	SA20	C9	SD0
A10	GND	B10	IRQ12	C10	IOCHRDY
A11	SMEMW#	B11	UBATT	C11	AEN
A12	SMEMR#	B12	IRQ15	C12	SA19
A13	IOW#	B13	-	C13	SA18
A14	IOR#	B14	IRQ14	C14	SA17
A15	DACK3#	B15	-	C15	SA16
A16	DRQ3	B16	DACK0#	C16	SA15
A17	DACK1#	B17	MEMR#	C17	SA14
A18	DRQ1	B18	DRQ0	C18	SA13
A19	REFRESH#	B19	MEMW#	C19	SA12
A20	CLK	B20	DACK5#	C20	SA11
A21	IRQ7	B21	SD8	C21	SA10
A22	IRQ6	B22	DRQ5	C22	SA9
A23	IRQ5	B23	SD9	C23	SA8
A24	IRQ4	B24	DACK6#	C24	SA7
A25	IRQ3	B25	SD10	C25	SA6
A26	DACK2#	B26	DRQ6	C26	SA5
A27	T/C	B27	SD11	C27	SA4
A28	BALE	B28	SD12	C28	SA3
A29	+5V	B29	SD13	C29	SA2
A30	OSC	B30	SD14	C30	SA1
A31	GND	B31	SD15	C31	SA0
A32	DRQ7	B32	MASTER#	C32	DACK7#

CPC203 ORDERING INFORMATION

CPC20301	GX1-300, CS5530A, SDRAM32 MB, VGA, 2xLAN, USB, Audio, 4HP
CPC20302	GX1-300, CS5530A, SDRAM128 MB, VGA, 2xLAN, USB, Audio, 4HP
CPC20303	GX1-300, CS5530A, SDRAM32 MB, VGA, TFT, 2xLAN, USB, Audio, LPT, KBD/MS, HDD, FDD, 12HP
KIB98101	KB686E-2 Kit Board Kbd, Ms, VGA, TFT, Audio
ACS00015	FC60-30 Cable ribbon 60 pin, 30 cm
ACS00016	FC72-30 Cable ribbon 72 pin, 30 cm