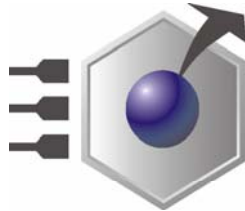


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An0040

CPU-145x & CPU-146x Cable-sets

Rev. 4.0

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ABOUT THIS MANUAL

This application note contains information regarding cable-set components for the CPU-145x and CPU-146x



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Conventions

The following table lists conventions used throughout this guide.

Icon	Notice Type	Description
	Information note	Important features or instructions
	Warning	Information to alert you to potential damage to a program, system or device or potential personal injury

Abbreviations

NC: Not Connected

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Contents

Conventions	3
Contents	5
Chapter 1 Component details.....	7
Cable-set components	8
Additional components.....	9
Chapter 2 Technical information.....	11
7000000045: IDE / Disk-On-Module	12
Description	12
7000000071: Parallel, Serial 1 & Serial 2.....	13
7000000074: Serial 1 & Serial 2.....	14
7000000124: Multifunction & VGA	15
7020000011: Auxiliary Power.....	16
ACS-9072-00: Multifunction Adaptor.....	17
ACS-9071-08: 1x RJ45 Ethernet 10/100MB adaptor	18
Package Contents:.....	18
ACS-9075-03: 1x 6-Port USB 2.0 Adaptor.....	18
Package Contents:.....	18
ACS-9075-02: 2x 2-Port USB 1.1 Adaptors.....	18
Package Contents:.....	18
ACS-9078-00: 1x RJ45 Gigabit Ethernet adaptor	19
Package Contents:.....	19
ACS-9078-00:.....	19
7030000163:.....	19
ACS-9076-01: AC97 Audio CODEC	20
Package Contents:.....	20
ACS-9076-01:.....	20
7030000300:.....	21
7030000240:.....	22
Related Documents.....	23
Where to find us.....	23

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Chapter 1 Component details

This chapter gives a brief description of all the components available in the cable-sets and also additionally available components, please refer to the table below for the revision numbers of the cable-sets:

Cable-set Part Number	For use with:	Cable-set Revision Date
CBL-1450-00	CPU-1450-xx CPU-1460-xx	11 Jan 2006
CBL-1451-00	CPU-1451-xx CPU-1461-xx	11 Jan 2006
CBL-1453-00	CPU-1453-xx CPU-1463-xx	13 Jan 2006

Cable-set components

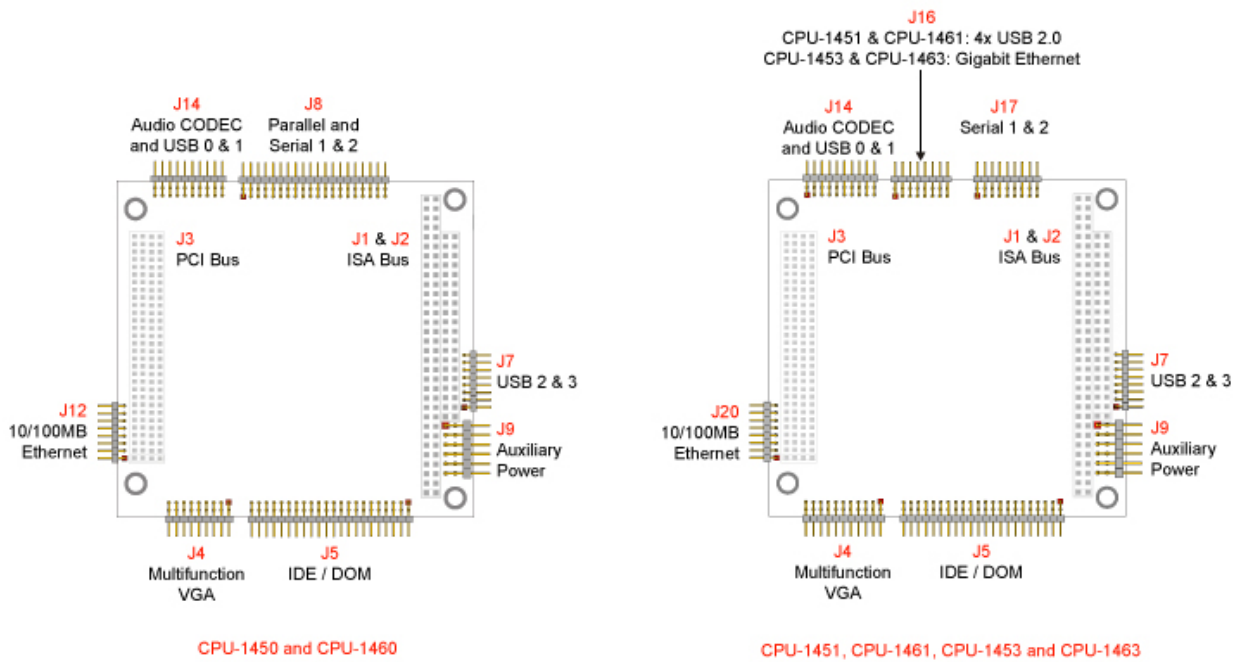


Figure 1 Connector layout on the CPU-145x module (for reference only)

Eurotech Part #	Qty.	CPU Model	CPU Connector	Type	Description	page
7000000045	1	CPU-145x & CPU-146x	J5	Cable	IDE / Disk-On-Module	12
7000000071	1	CPU-1450 & CPU-1460	J8	Cable	Serial 1, Serial 2 & Parallel	13
7000000074	1	CPU-1451, CPU-1461 CPU-1453, CPU-1463	J17	Cable	Serial 1 & Serial 2	14
ACS-9072-00	1	CPU-145x & CPU-146x	--	Adaptor	Mouse, Keyboard & Battery	17
7000000124	1	CPU-145x & CPU-146x	J4	Cable	Multifunction & VGA	15
7020000011	1	CPU-145x & CPU-146x	J9	Cable	Auxiliary power	16

Table 1 Components available in the CBL-1450-00 & CBL-1460-00 Cable Sets

Additional components

The following table shows a list of accessories that can be ordered separately, for pricing and availability contact your supplier quoting the Eurotech Part number and Quantity required:

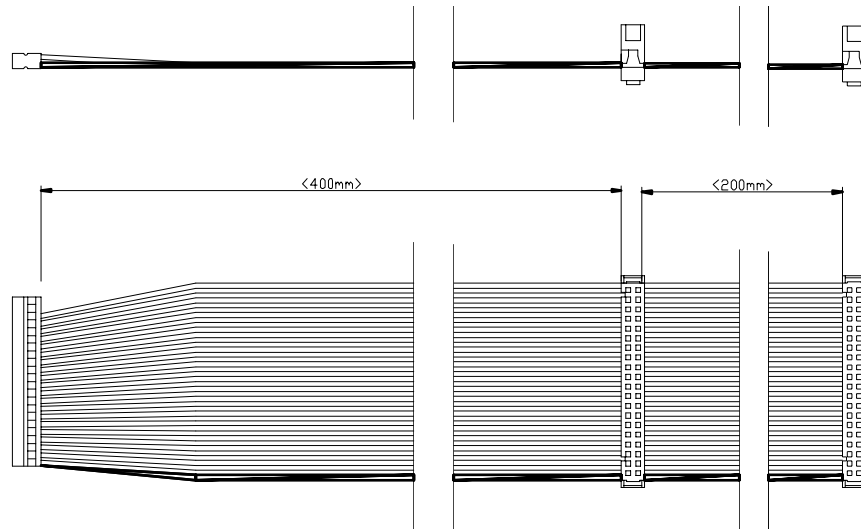
Eurotech Part #	Qty.	CPU Model #	CPU Connector	Type	Description	Ref page
ACS-9076-01	1	CPU-145x CPU-146x	J14	Adaptor set	AC97 Audio CODEC	20
ACS-9071-08	1	CPU-145x CPU-146x	J20 / J12	Adaptor set	RJ45 10/100MB Ethernet	18
ACS-9078-00	1	CPU-1453 CPU-1463	J16	Adaptor set	Gigabit Ethernet	19
ACS-9075-02	1	CPU-1450 CPU-1460 CPU-1453 CPU-1463	J16	Adaptor set	2x 2-Port USB 1.1	18
ACS-9075-03	1	CPU-1451 CPU-1461	J7 & J16	Adaptor set	1x 6-Port USB 2.0	18

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Chapter 2 Technical information

The following pages describe the assorted cables and adaptors in more detail.

700000045: IDE / Disk-On-Module



Connector #	Name	QTY Pins	Format	Pitch (mm)
P1	CPU J5	44	22x2	2.00
P2 & P3	Disc 1 & 2	40	20x2	2.54

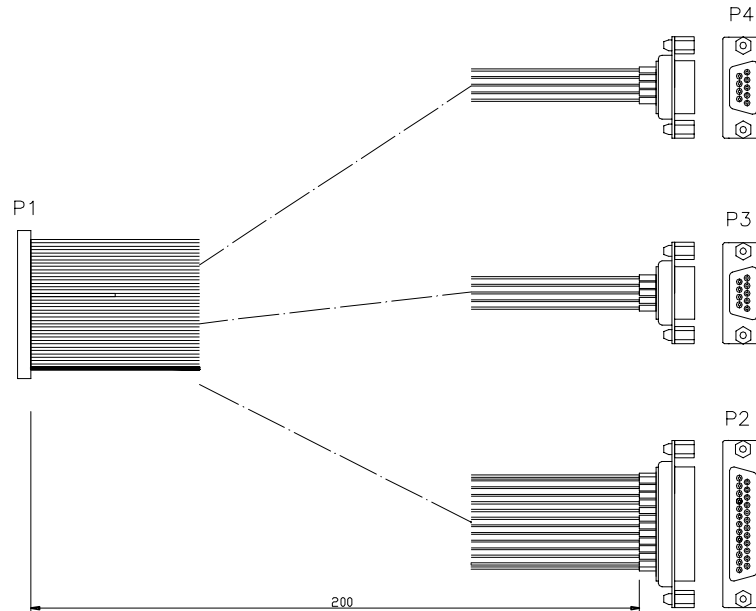
P1 Pin	Description	Direction	Connector	Pin	P1 Pin	Description	Direction	Connector	Pin
1	RESET	>	P2 / P3	1	23	DIOW*	>	P2 / P3	23
2	Ground		P2 / P3	2	24	Ground		P2 / P3	24
3	DD7	<>	P2 / P3	3	25	DIOR*	>	P2 / P3	25
4	DD8	<>	P2 / P3	4	26	Ground		P2 / P3	26
5	DD6	<>	P2 / P3	5	27	IORDY	<	P2 / P3	27
6	DD9	<>	P2 / P3	6	28	Reserved		P2 / P3	28
7	DD5	<>	P2 / P3	7	29	DMACK*	>	P2 / P3	29
8	DD10	<>	P2 / P3	8	30	Ground		P2 / P3	30
9	DD4	<>	P2 / P3	9	31	INTRQ	<	P2 / P3	31
10	DD11	<>	P2 / P3	10	32	IOCS16*	<	P2 / P3	32
11	DD3	<>	P2 / P3	11	33	DA1	>	P2 / P3	33
12	DD12	<>	P2 / P3	12	34	PDIAG*	**	P2 / P3	34
13	DD2	<>	P2 / P3	13	35	DA0	>	P2 / P3	35
14	DD13	<>	P2 / P3	14	36	DA2	>	P2 / P3	36
15	DD1	<>	P2 / P3	15	37	CS1FX*	>	P2 / P3	37
16	DD14	<>	P2 / P3	16	38	CS3FX*	>	P2 / P3	38
17	DD0	<>	P2 / P3	17	39	DASP*	<	P2 / P3	39
18	DD15	<>	P2 / P3	18	40	Ground		P2 / P3	40
19	Ground		P2 / P3	19	41	NC	-	-	-
20	Key Pin		P2 / P3	20	42	NC	-	-	-
21	DMARQ	<	P2 / P3	21	43	NC	-	-	-
22	Ground		P2 / P3	22	44	NC	-	-	-

Notes:

- * = Active Low
- > = To drive from controller
- < = To controller from drive
- ** = Drive to drive intercommunication

700000071: Parallel, Serial 1 & Serial 2

Note: for use with the CPU-1450 and CPU-1460



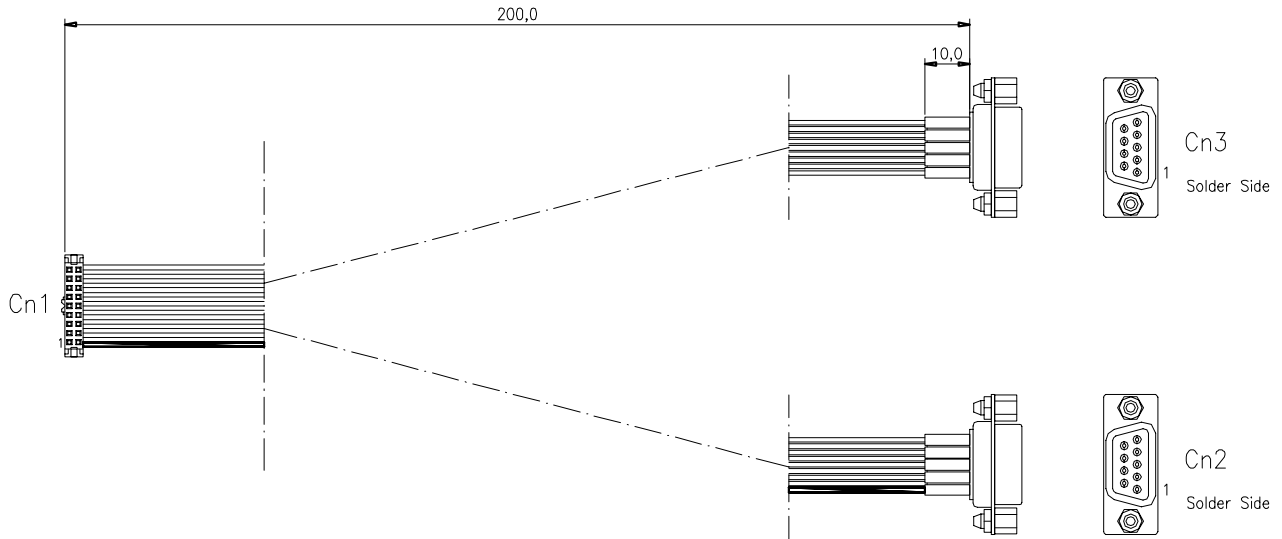
Connector #	Name	QTY Pins	Format	Pitch
P1	CPU J8	40	20x2	2.00mm
P2	Parallel	25	DB25 Female	-
P3	Serial 1	9	DB9 Male	-
P4	Serial 2	9	DB9 Male	-

P1 Pin #	Description	Connector #	Pin #
1	Strobe	P2	1
2	AUTOFD	P2	14
3	PD0	P2	2
4	ERROR	P2	15
5	PD1	P2	3
6	INIT	P2	16
7	PD2	P2	4
8	SLCTIN	P2	17
9	PD3	P2	5
10	GND	P2	18
11	PD4	P2	6
12	GND	P2	19
13	PD5	P2	7
14	GND	P2	20
15	PD6	P2	8
16	GND	P2	21
17	PD7	P2	9
18	ACK	P2	10
19	BUSY	P2	11
20	PE	P2	12

P1 Pin #	Description	Connector #	Pin #
21	SLCT	P2	13
22	Not Connected	P2	26
23	DCD 1	P3	1
24	DSR 1	P3	6
25	RX 1	P3	2
26	RTS 1	P3	7
27	TX 1	P3	3
28	CTS 1	P3	8
29	DTR 1	P3	4
30	RI 1	P3	9
31	GND 1	P3	5
32	DCD 2	P4	1
33	DSR 2	P4	6
34	RX 2	P4	2
35	RTS 2	P4	7
36	TX 2	P4	3
37	CTS 2	P4	8
38	DTR 2	P4	4
39	RI 2	P4	9
40	GND 2	P4	5

700000074: Serial 1 & Serial 2

Note: for use with the CPU-1451, CPU-1461, CPU-1453 and CPU-1463

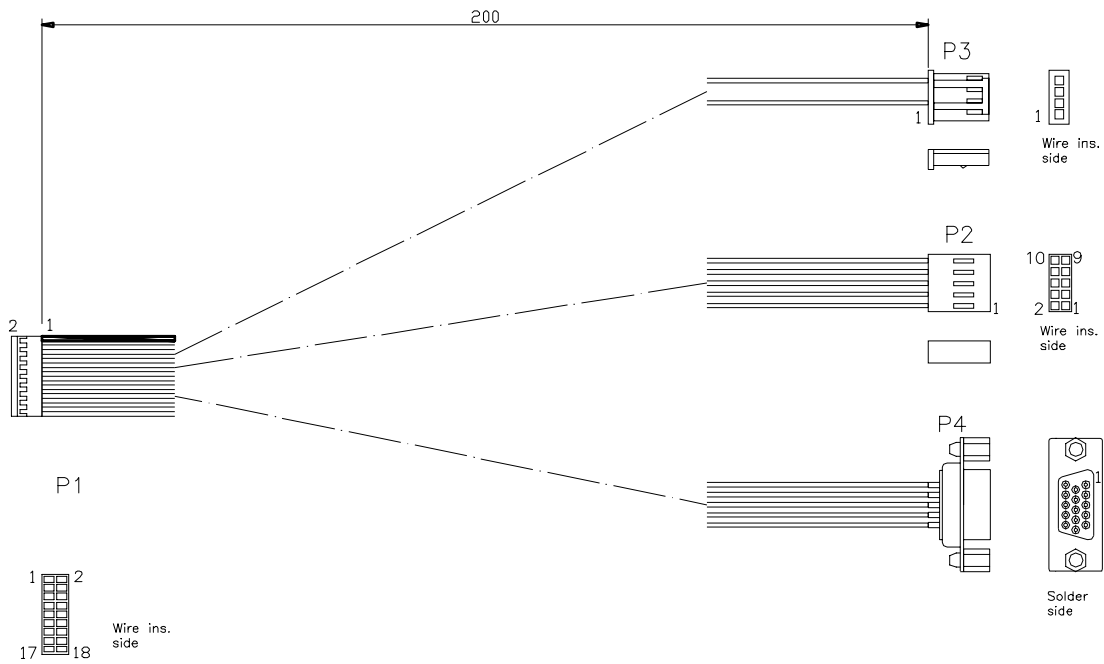


Connector #	Name	QTY Pins	Format	Pitch
CN1	CPU J17	18	9x2	2.00mm
CN2	Serial 1	9	DB9 Male	-
CN2	Serial 2	9	DB9 Male	-

CN1 Pin #	Description	Connector #	Pin #
1	DCD 1	CN2	1
2	DSR 1	CN2	6
3	RX 1	CN2	2
4	RTS 1	CN2	7
5	TX 1	CN2	3
6	CTS 1	CN2	8
7	DTR 1	CN2	4
8	RI 1	CN2	9
9	GND 1	CN2	5

P1 Pin #	Description	Connector #	Pin #
10	DCD 2	CN3	1
11	DSR 2	CN3	6
12	RX 2	CN3	2
13	RTS 2	CN3	7
14	TX 2	CN3	3
15	CTS 2	CN3	8
16	DTR 2	CN3	4
17	RI 2	CN3	9
18	GND 2	CN3	5

700000124: Multifunction & VGA

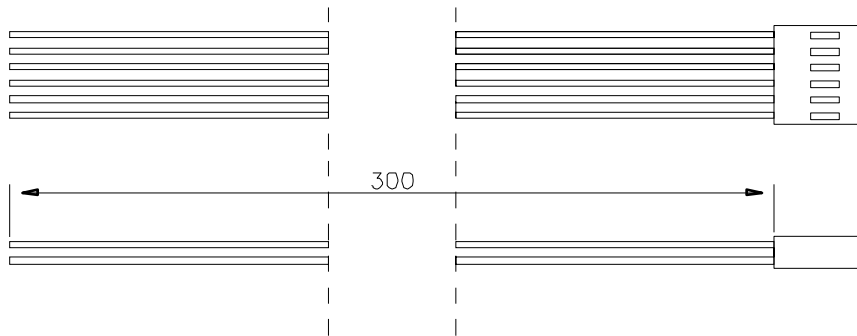


Connector #	Name	QTY Pins	Format	Pitch (mm)
P1	CPU J4	18	9x2	2.00
P2	Multifunction	10	5x2	2.54
P3	Mouse	4	4x1	2.54
P4	VGA	15	D-Sub Female	-

P1 Pin #	Description	Connector #	Pin #
1	GND MF	P2	7
2	VDD MF	P2	8
3	KB DAT	P2	5
4	KB CLK	P2	6
5	BATT IN	P2	9
6	SPKR	P2	1
7	RES PB	P2	3
8	MSDAT	P3	4
9	MSCLK	P3	2

P1 Pin #	Description	Connector #	Pin #
10	GND VDIG	P4	5, 10
11	H SYNC	P4	13
12	V SYNC	P4	14
13	RED	P4	1
14	GREEN	P4	2
15	DDC1 SCL	P4	15
16	DD0 SDA	P4	12
17	GND VGA	P4	6, 7, 8
18	BLUE	P4	3

702000011: Auxiliary Power



Connector #	Name	QTY Pins	Format	Pitch (mm)
P1	CPU J9	12	6x2	2.54

Pin #	Signal	Cable Colour
1	GND	Red
2	VDD	Black
3	N.C.	Yellow
4	+12v	Not Connected
5	-5V	Green
6	-12V	Orange
7	GND	Red
8	VDD	Black
9	N.C.	Not Connected
10	PWRBTN#	Black
11	+5VSB	Grey
12	PSOEN#	Purple

Notes:

- +5VSB: +5 Volts-Always from the ATX Power supply
- PSOEN#: Power-On command to ATX Power supply

ACS-9072-00: Multifunction Adaptor

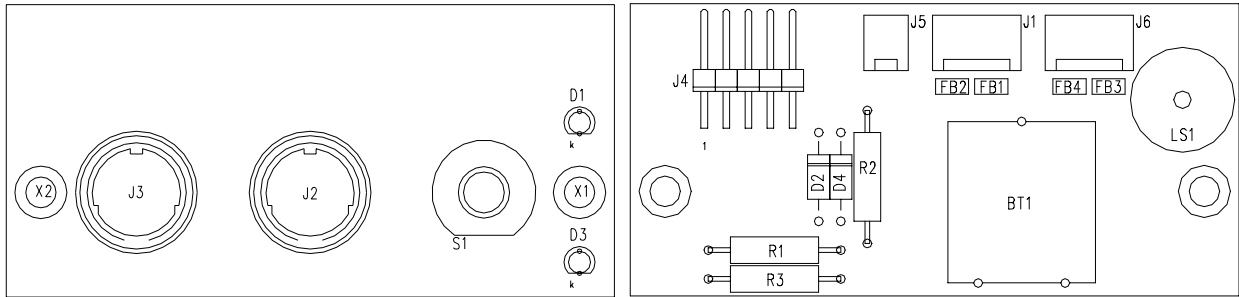


Figure 2 ACS-9072-00 Top / Bottom View

Component Label	Location	Description	Pins	Format	Pitch (mm)
BT1	Bottom	Battery, 3.6V, 60mAh	-	-	-
LS1	Bottom	Speaker,	-	-	-
D1	Top	LED (Green), Power	-	-	-
D3	Top	LED (Yellow), Speaker	-	-	-
S1	Top	Reset Button	-	-	-
J1	Bottom	Extension Keyboard	4	4x1	2.54
J2	Top	Keyboard Input	6	Mini DIN	-
J3	Top	Mouse Input	6	Mini DIN	-
J4	Bottom	Multifunction Output	10	5x2	2.54
J5	Bottom	Not Used with this CPU	2	2x1	2.54
J6	Bottom	Mouse Output	4	4x1	2.54

Conn.	Description	Pin #	Signal
J1	Ext. Keyboard Input	1	VCC
		2	KB Clock
		3	Ground
		4	KB Data
J2	Keyboard Input	1	KB Data
		2	NC
		3	Ground
		4	VCC
		5	KB Clock
		6	NC
J3	Mouse Input	1	Mouse Data
		2	NC
		3	Ground
		4	VCC
		5	Mouse Clock
		6	NC

Conn.	Description	Pin #	Signal
J4	Multifunction Output To CPU J4	1	SPKR
		2	NC
		3	RES_PB_IN
		4	NC
		5	KBDAT
		6	KBCLK
		7	GND
		8	+5V
		9	BATT_IN
		10	NC
J6	Mouse output To CPU J4	1	VCC
		2	Mouse Clock
		3	Ground
		4	Mouse Data

ACS-9071-08: 1x RJ45 Ethernet 10/100MB adaptor

Package Contents:

Qty	Part Number	Description
1	ACS-9071	RJ45 10/100MB Ethernet adaptor
1	7030000163	Cable, CPU J12 / J20 to Adaptor

Refer to Application Note “An0059: ACS-9071 User manual” for further details.

ACS-9075-03: 1x 6-Port USB 2.0 Adaptor

Package Contents:

Qty	Part Number	Description
1	ACS-9075	6-Port USB 2.0 adaptor
1	7000000155	Cable, CPU J16 to adaptor
1	7000000160	Cable, CPU J7 to adaptor

Note: For use with CPU-1451 and CPU-1461

Refer to Application Note “An0064: ACS-9075 User manual” for further details.

ACS-9075-02: 2x 2-Port USB 1.1 Adaptors

Package Contents:

Qty	Part Number	Description
2	ACS-9075	2-Port USB 1.1 adaptors
1	7030000240	Cable, CPU J16 to adaptor
1	7000000160	Cable, CPU J7 to adaptor

Note: For use with CPU-1453 and CPU-1463

Refer to Application Note “An0064: ACS-9075 User manual” for further details.

ACS-9078-00: 1x RJ45 Gigabit Ethernet adaptor

Package Contents:

Part Number	Qty	Description
ACS-9078	1	RJ45 Gigabit Ethernet adaptor
7030000163	1	Cable, CPU J16 to adaptor

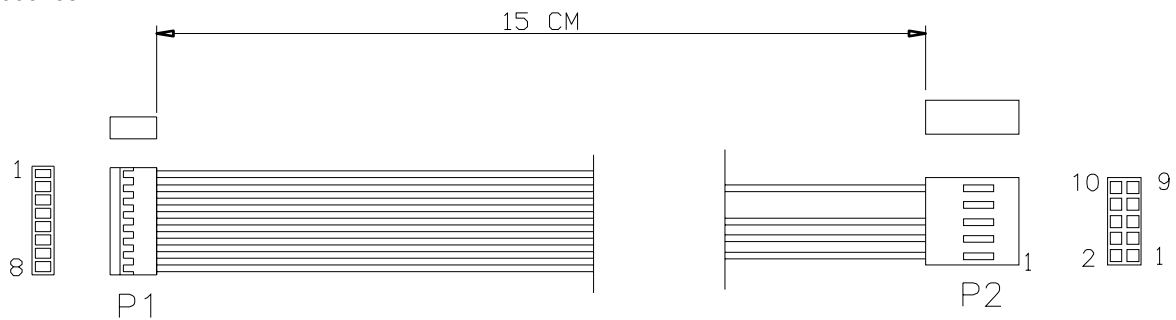
ACS-9078-00:

No technical drawings are currently available for the ACS-9078-00

If you require more detailed information contact the Eurotech technical support team at:

techsupp@eurotech.it

7030000163:



Connector #	Name	QTY Pins	Format	Pitch (mm)
P1	CPU J16	8	8x1	2.00
P2	Adaptor	10	2x5	2.54

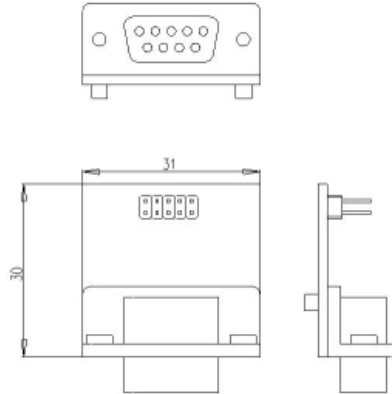
P1 pin #	Signal	P2 pin #
1	VDD	1
2	Activity LED	2
3	RX+	3
4	RX-	4
5	Link	5
6	Ground	6
7	TX+	9
8	TX-	10

ACS-9076-01: AC97 Audio CODEC

Package Contents:

Qty	Part Number	Description
1	ACS-9076-01	AC97 Audio CODEC
1	7030000240	Cable CPU J14 to USB & AC97
1	7030000300	AC97 to 3 x 3.5mm Female Stereo Jack

ACS-9076-01:



Component Label	Description	Pins	Format	Pitch (mm)
J1	CPU J14	10	5x2	2.00
J2	Audio Input / Output	9	DB9 Female	-

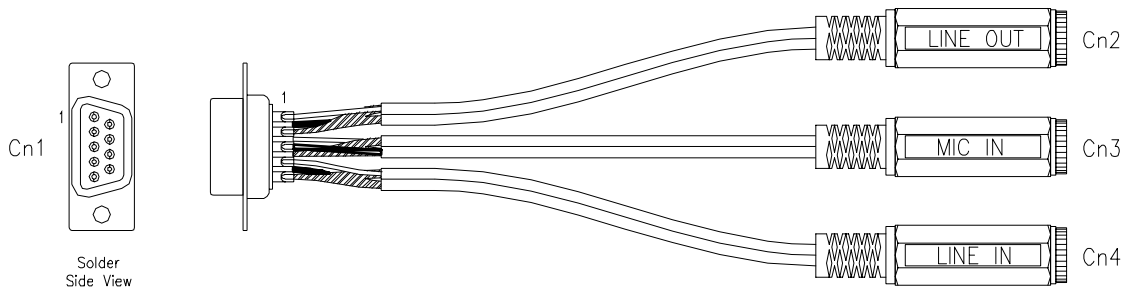
J1 Pinout (Analogue In / Out):

Pin #	Signal
1	Line Out Left
2	Ground
3	VREF Microphone
4	Line In Left
5	Ground
6	Line Out Right
7	Microphone In
8	Ground
9	Line In Right

J2 Pinout (AC97 from CPU J14):

Pin #	Signal
1	VDD
2	Ground
3	SDATA OUT
4	BIT CLOCK
5	PC BEEP
6	GROUND
7	RESET
8	SYNC
9	SDATA IN
10	AC97 Clock

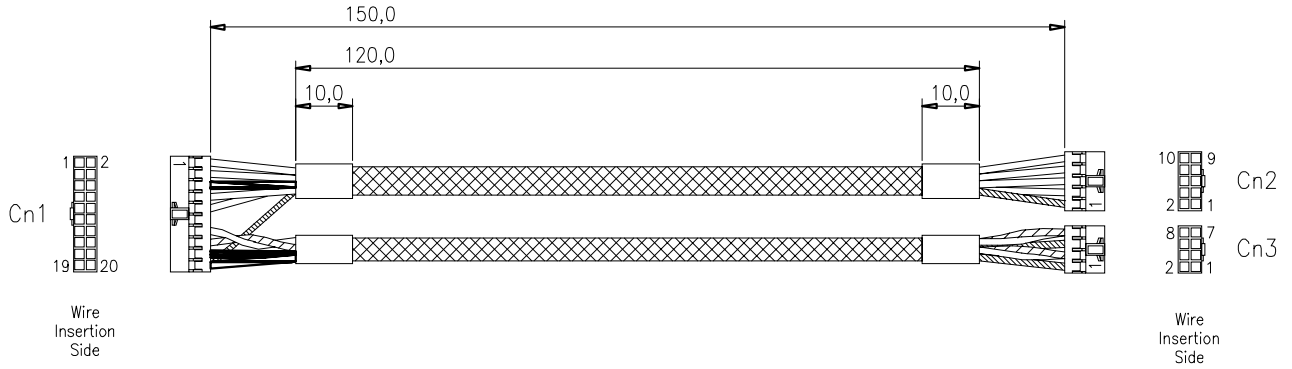
703000300:



Component Label	Description	Pins	Format
CN1	From ACS-9076 J2	9	DB9 Male
CN2	Line Out	-	3.5mm Stereo Jack Socket
CN3	Microphone In	-	3.5mm Stereo Jack Socket
CN4	Line In	-	3.5mm Stereo Jack Socket

CN1 Pin #	To	Tab	Signal	Wire
1	CN2	Left	Line Out Left	White
6	CN2	Right	Line Out Right	Red
2	CN2	Shield	Ground	Cable Shield
7	CN3	Left	Microphone In	White
3	CN3	Right	Microphone VREF	Red
8	CN3	Shield	Ground	Cable Shield
4	CN4	Left	Line In Left	White
9	CN4	Right	Line In Right	Red
5	CN4	Shield	Ground	Cable Shield

703000240:



Component Label	Description	Pins	Format	Pitch (mm)
CN1	CPU J14	20	10x2	2.00
CN2	AC97	10	5x2	2.00
CN3	USB0 & USB1	8	4x2	2.00

CN1 Pin #	To	Pin #	Signal
1	CN2	5	SPKR
2	NC	-	SDIN1
3	CN2	3	SDOUT
4	NC	-	CDC_EN#
5	CN2	2	Ground
6	CN2	6	Ground
7	CN2	9	SDIN0
8	CN2	4	BITCLK
9	CN2	7	RST
10	CN2	8	SYNC
11	NC	-	Ground
12	NC	-	USB_OC1#
13	CN3	4	USB_P0N
14	CN3	8	USB_P1N
15	CN3	3	USB_P0P
16	CN3	7	USB_P1P
17	CN3	2	Ground
18	CN3	1, 5	+5V
19	CN3	6	Ground
20	CN2	1	+5V

Related Documents

For further information please refer to the specific user manuals for the individual CPU's

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