



1 2 3

A

B

C


All rights reserved

Coding Key	
V(I/O)	
+3.3V	+5V
	
Cadmium Yellow	Brilliant Blue

Hartmann Elektronik
 CPCI 3HE RB 1Slot 32Bit+
 BUS727 Rev.BA

Silkscreen Top
 Pads Top

D

			2001	Date	Name	Title Hartmann Elektronik CPCI 3HE RB 1Slot 32Bit+ BUS727 Rev.BA	
			Author	21.03.	Wiedmann		
			Check	21.03.	Ruthardt		
			DIN A4 M 1:1			Number	Sheet
			 HARTMANN ELEKTRONIK MOTORSTRASSE 43 D-70499 STUTTGART				of
Rev	Description	Date	Name	Device: HE-C33RB01--14		File: BUS727BA	

1 2 3

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Busbar V(I/O) = 5V

Busbar V(I/O) = 3.3V

Silkscreen Bottom
Pads Bottom

Hartmann Elektronik
 CPCI 3HE RB 1Slot 32Bit+
 Rev.BA
 BUS277

D

D

			2001	Date	Name	Title	Hartmann Elektronik CPCI 3HE RB 1Slot 32Bit+ BUS277 Rev.BA
			Author	21.03.	Wiedmann		
			Check	21.03.	Ruthardt		
					DIN A4 M 1:1	Number	Sheet
			HARTMANN ELEKTRONIK MOTORSTRASSE 43 D-70499 STUTTGART				of
Rev	Description	Date				Name	Device:

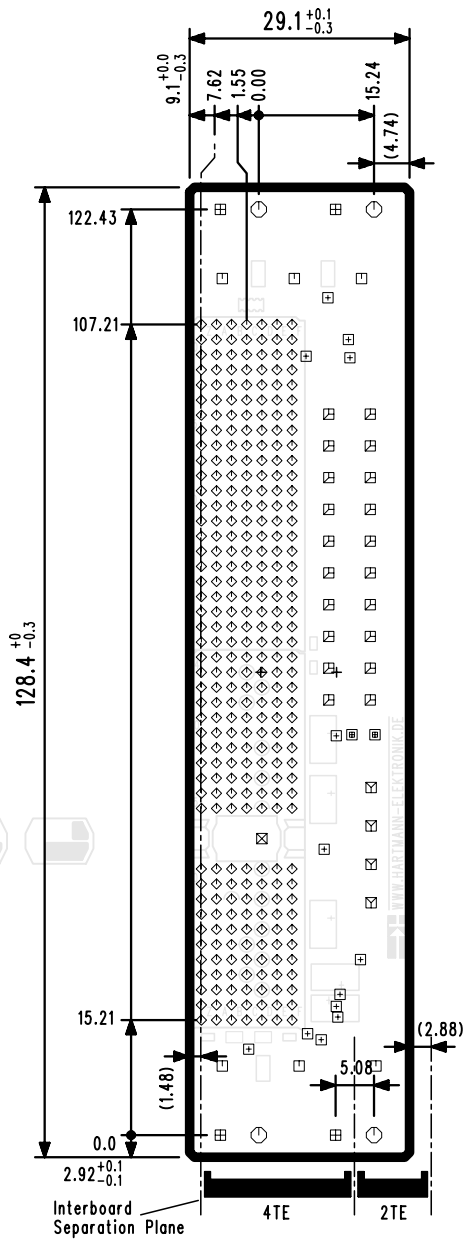
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Hartmann Elektronik
 CPCI 3HE RB 1Slot 32Bit+
 BUS727 Rev.BA

			2001	Date	Name	Title Hartmann Elektronik CPCI 3HE RB 1Slot 32Bit+ BUS727 Rev.BA	
			Author	21.03.	Wiedmann		
			Check	21.03.	Ruthardt		
			DIN A4 M 1:1			Number	Sheet
			 HARTMANN ELEKTRONIK MOTORSTRASSE 43 D-70499 STUTTGART				of
Rev	Description	Date				Name	Device: HE-C33RB01--14

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A

A



B

B

All rights reserved

C

C


Coding Key	
V(I/O)	
+3.3V	+5V
	
Cadmium Yellow	Brilliant Blue

Hartmann Elektronik
CPCI 3HE RB 2Slot 32bit+
BUS726 Rev.BA

Silkscreen Top
Pads Top

D

D

			2001	Date	Name	Title Hartmann Elektronik CPCI 3HE RB 2Slot 32bit+ BUS726 Rev.BA
			Author	28.02.	Wiedmann	
			Check	28.02.	Hamann	
					DIN A4 M 1:1	Number
					 HARTMANN ELEKTRONIK MOTORSTRASSE 43 D-70499 STUTTGART	
Rev	Description	Date	Name			Sheet of
		1				Device: HE-C33RB02---4
						File: BUS726BA

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A

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All rights reserved

Busbar V(I/O) = 5V

Busbar V(I/O) = 3.3V

Hartmann Elektronik
CPCI 3HE RB 2Slot 32bit+
Rev.BA

Silkscreen Bottom
Pads Bottom

D

D

Rev	Description	Date	Name	2001	Date	Name	Title	Number	Sheet
				Author	28.02.	Wiedmann	Hartmann Elektronik CPCI 3HE RB 2Slot 32bit+ BUS726 Rev.BA		of
				Check	28.02.	Hamann			
				DIN A4 M 1:1					
				HARTMANN ELEKTRONIK MOTORSTRASSE 43 D-70499 STUTTGART			Device: HE-C33RB02---4	File: BUS726BA	

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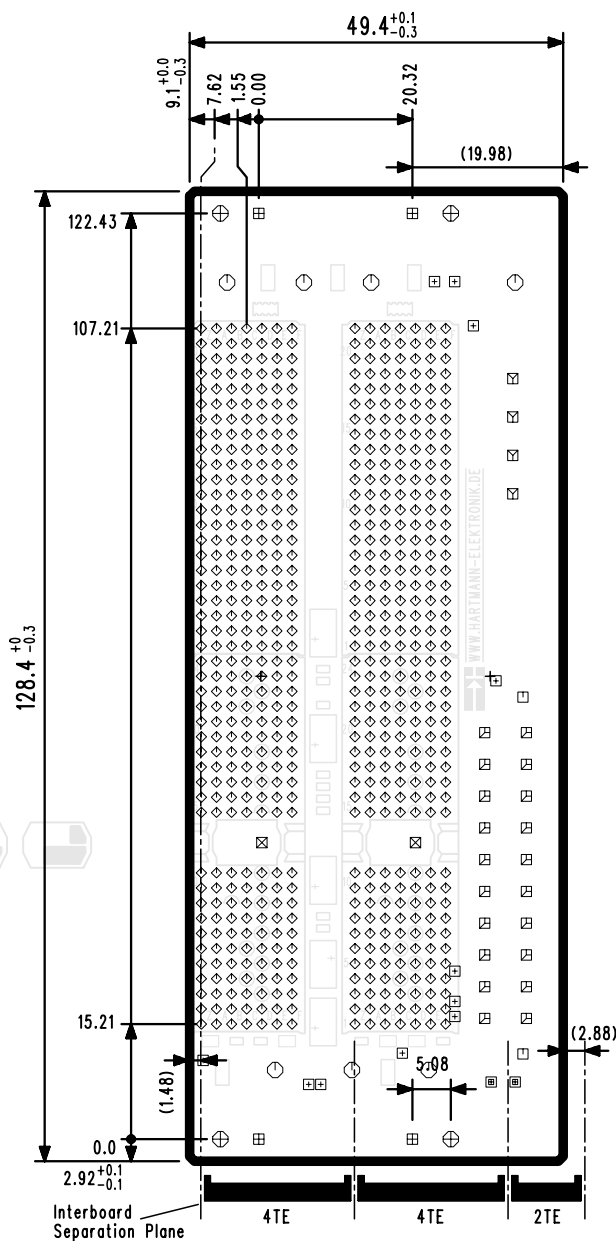
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C

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Hartmann Elektronik
 CPCI 3HE RB 2Slot 32bit+
 BUS726 Rev.BA

D

D



			2001	Date	Name	Title Hartmann Elektronik CPCI 3HE RB 2Slot 32bit+ BUS726 Rev.BA
			Author	28.02.	Wiedmann	
			Check	28.02.	Hamann	
					DIN A4 M 1:1	Number Sheet of
					 HARTMANN ELEKTRONIK MOTORSTRASSE 43 D-70499 STUTTGART	
Rev	Description	Date	Name			Device: HE-C33RB02---4 File: BUS726BA

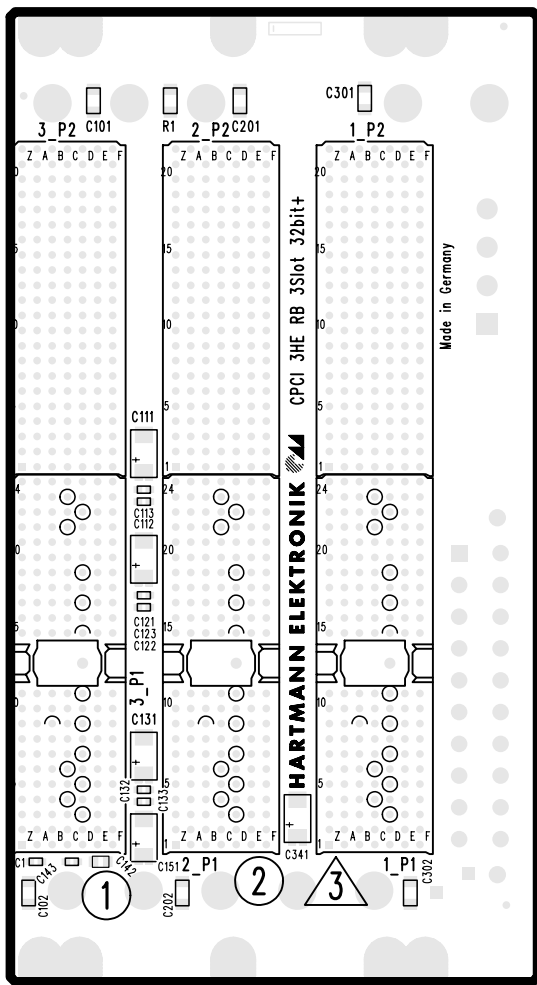
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Coding Key	
V(I/O)	
+3.3V	+5V
	
Cadmium Yellow	Brilliant Blue



Hartmann Elektronik
 CPCI 3HE RB 3Slot 32bit+
 BUS725 Rev.BB

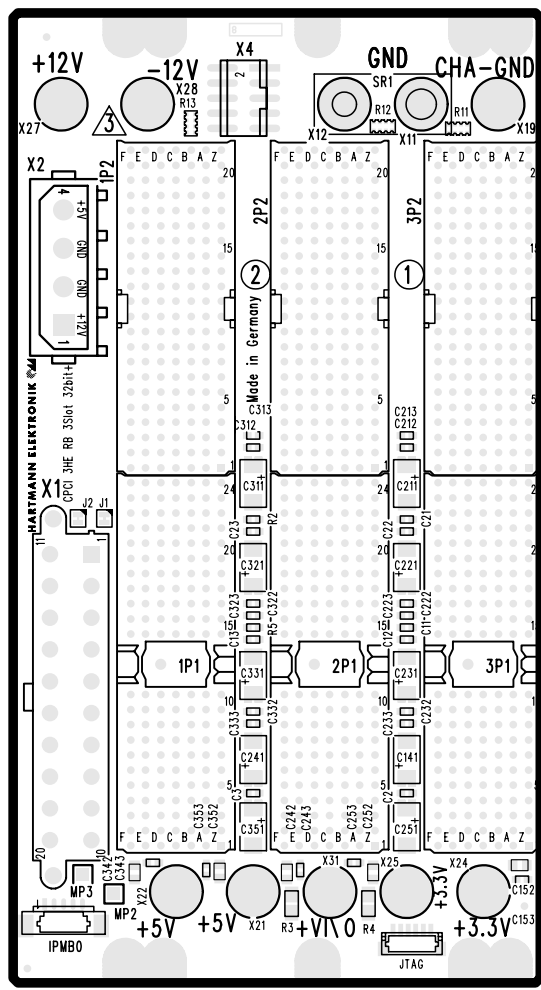
Silkscreen Top
 Pads Top

			2006	Date	Name	Title Hartmann Elektronik CPCI 3HE RB 3Slot 32bit+ BUS725 Rev.BB
			Author	29.06.	Wiedmann	
			Check	29.06.	Wiedmann	
					DIN A4 M 1:1	Number _____ Sheet _____ of _____
					HARTMANN ELEKTRONIK MOTORSTRASSE 43 D-70499 STUTTGART	
Rev	Description	Date	Name	Device: HE-C33RB03---4		File: BUS725BB

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X4 Pin Assignment

Pin	Signal	Pin	Signal
1	PRST-	2	FAL-
3	DEG-	4	+3.3V-Sense
5	+3.3V	6	GND-Sense (+3.3V)
7	+5V	8	+5V-Sense
9	GND	10	GND-Sense (+5V)

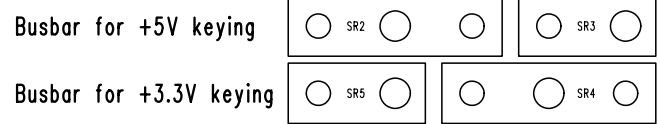


IPMBO Pin Assignment

Pin	Signal
1	IPMB_SCL
2	GND
3	IPMB_SDA
4	IPMB_PWR
5	SMB_RSV

JTAG Pin Assignment

Pin	Signal
1	GND
2	TCK
3	TMS
4	TRST-
5	TDI
6	TDO



Silkscreen Bottom
Pads Bottom

Hartmann Elektronik
CPCI 3HE RB 3Slot 32bit+
BUS725 Rev.BB

D	2006	Date	Name	Title Hartmann Elektronik CPCI 3HE RB 3Slot 32bit+ BUS725 Rev.BB	
	Author	29.06.	Wiedmann		
	Check	29.06.	Wiedmann		
			DIN A4 M 1:1		
				Number	Sheet
				Device: HE-C33RB03---4	File: BUS725BB
					of
	Rev	Description	Date	Name	
	1				

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Common tolerance: $\pm 0.15\text{mm}$

Dimensions: $69.7^{+0.1}_{-0.3}$, $128.4^{+0}_{-0.3}$, 122.43 , 107.21 , 15.21 , 0.0 , $2.92^{+0.1}_{-0.1}$, $9.1^{+0.0}_{-0.3}$, 7.62 , 5.08 , 1.55 , 0.00 , $2 \times 20.32 = 40.64$, (19.98) , (1.48) , (2.88)

Labels: III-Label Soldermask Top, Interboard Separation Plane, 4TE, 4TE, 4TE, 2TE

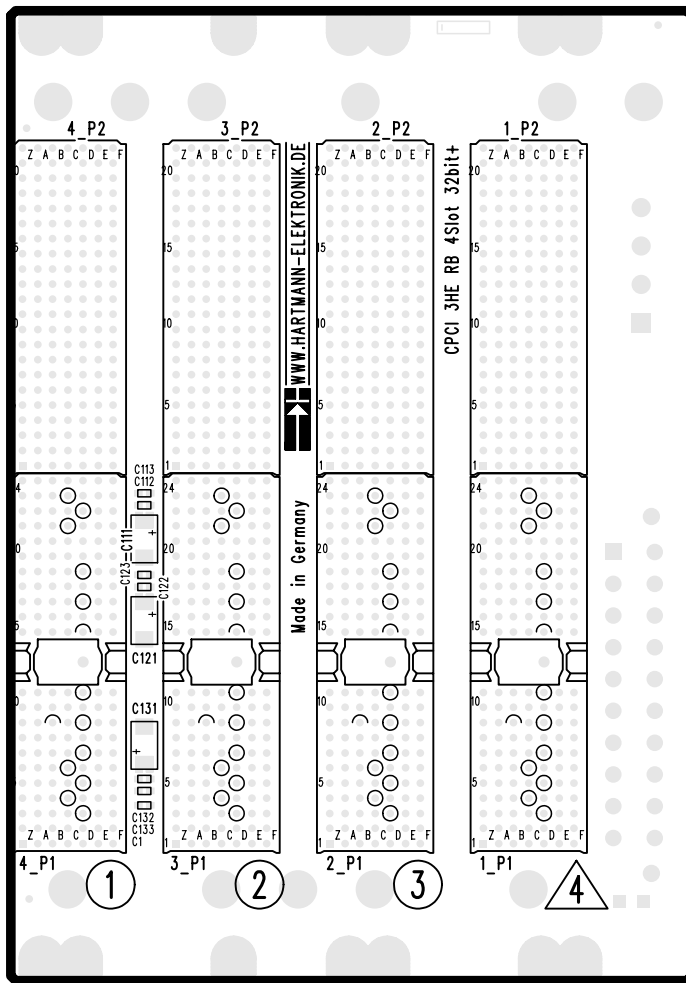
Hartmann Elektronik
 CPCI 3HE RB 3Slot 32bit+
 BUS725 Rev.BB

			2006	Date	Name	Title Hartmann Elektronik CPCI 3HE RB 3Slot 32bit+ BUS725 Rev.BB	
			Author	29.06.	Wiedmann		
			Check	29.06.	Wiedmann		
			DIN A4 M 1:1			Number	Sheet
			 HARTMANN ELEKTRONIK MOTORSTRASSE 43 D-70499 STUTTGART				of
Rev	Description	Date				Name	Device: HE-C33RB03---4

1 2 3

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Coding Key	
V(I/O)	
+3.3V	+5V
Cadmium Yellow	Brilliant Blue

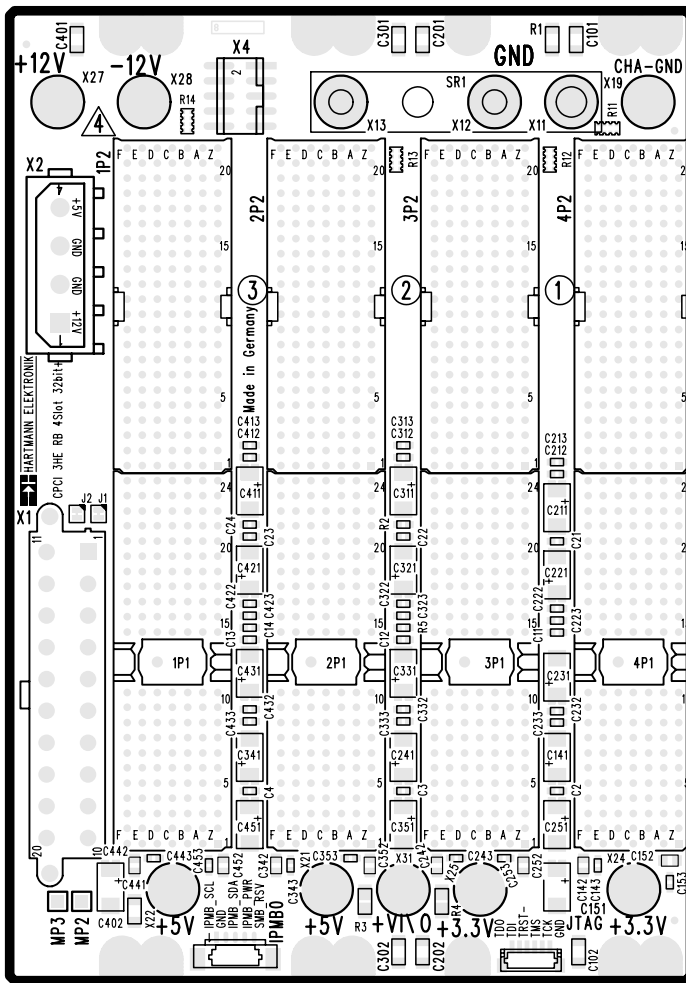


Hartmann Elektronik
 CPCI 3HE RB 4Slot 32bit+
 BUS724 Rev.BA

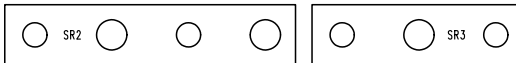
Silkscreen Top
 Pads Top

			2001	Date	Name	Title Hartmann Elektronik CPCI 3HE RB 4Slot 32bit+ BUS724 Rev.BA	
			Author	08.03.	Wiedmann		
			Check	08.03.	Hamann		
			DIN A4 M 1:1			Number	Sheet
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Rev	Description	Date				Name	Device: HE-C33RA04---4

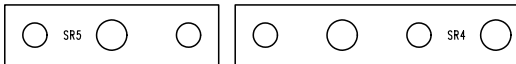
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Busbar for +5V keying



Busbar for +3.3V keying



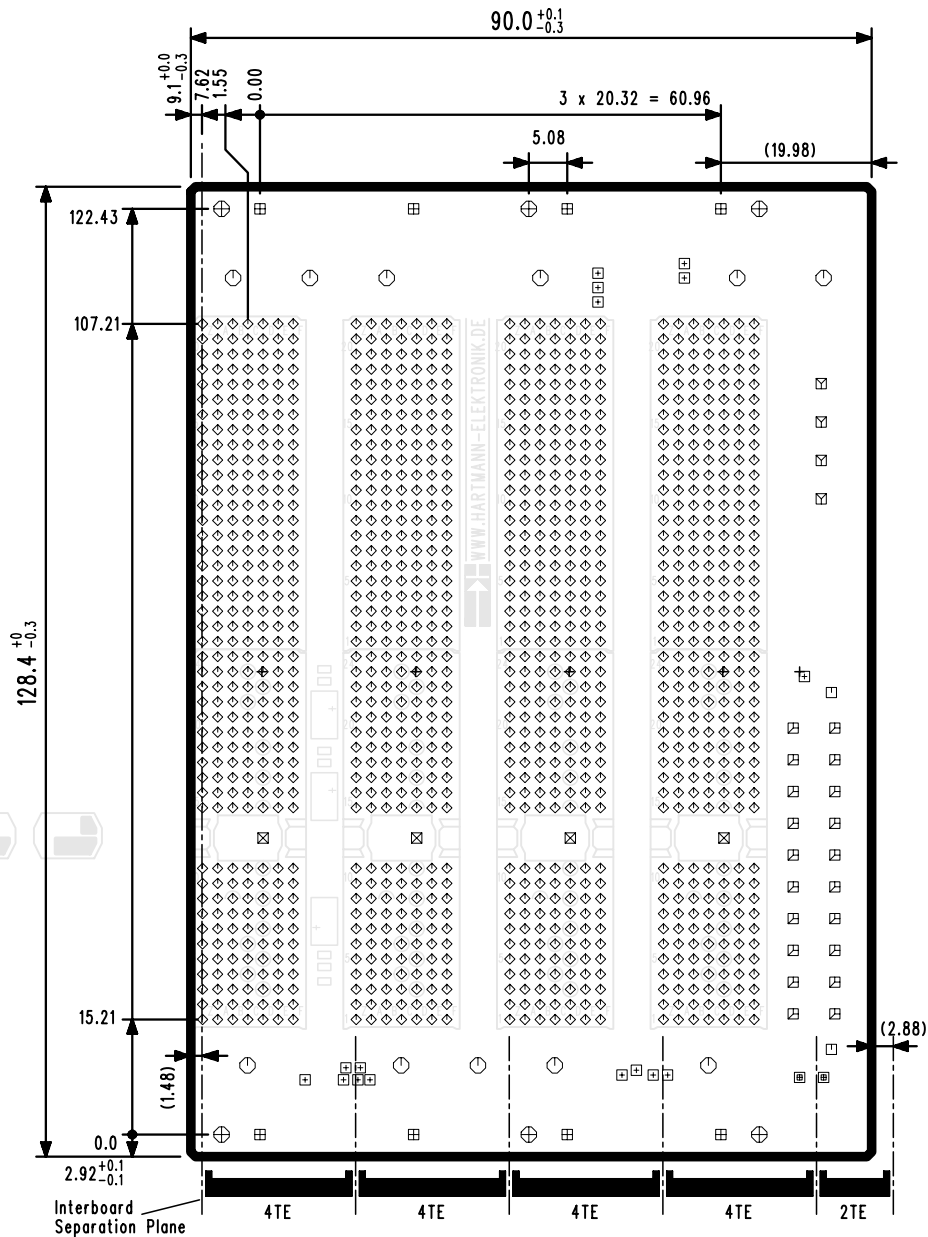
Hartmann Elektronik
 CPCI 3HE RB 4Slot 32bit+
 Rev.BA

Silkscreen Bottom
 Pads Bottom


			2001	Date	Name
			Author	08.03.	Wiedmann
			Check	08.03.	Hamann
				DIN A4	
				M 1:1	
			HARTMANN ELEKTRONIK MOTORSTRASSE 43 D-70499 STUTTGART		
Rev	Description	Date	Name		

Title	Hartmann Elektronik CPCI 3HE RB 4Slot 32bit+ BUS724 Rev.BA	
Number		Sheet
Device:	HE-C33RA04---4	File: BUS724BA
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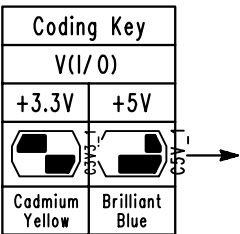
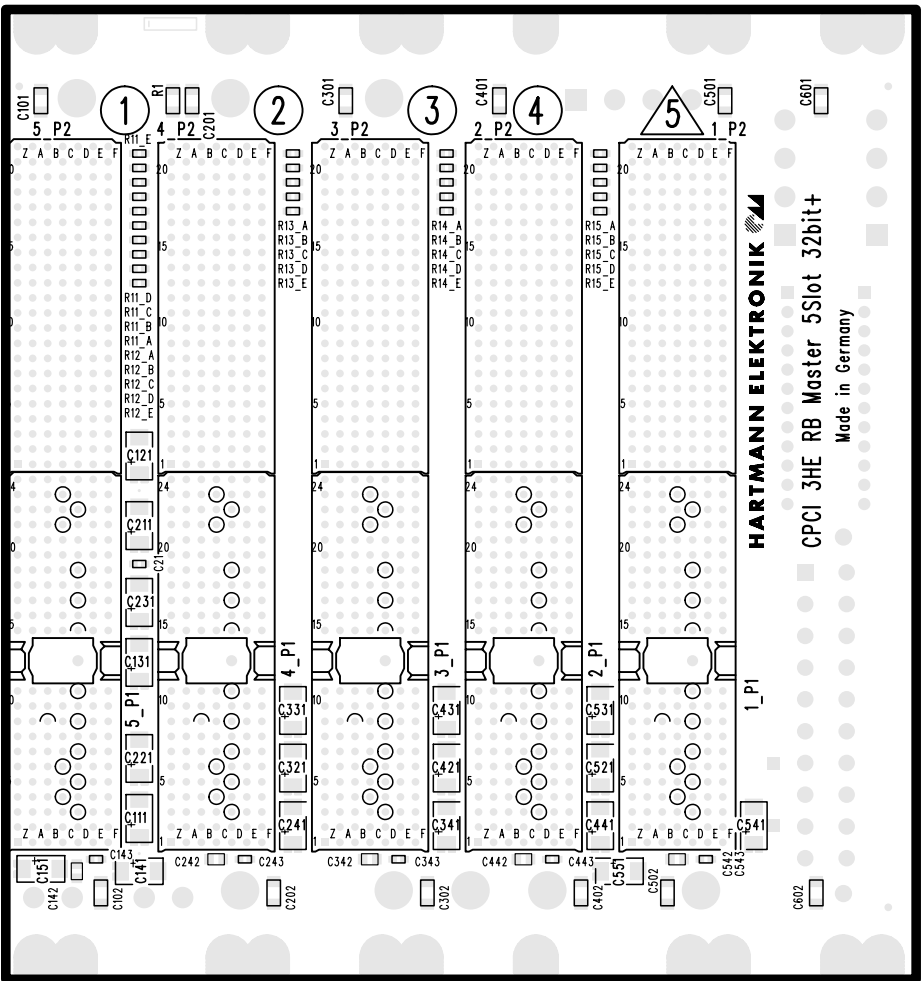
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Hartmann Elektronik
 CPCI 3HE RB 4Slot 32bit+
 BUS724 Rev.BA

D			2001	Date	Name	Title Hartmann Elektronik CPCI 3HE RB 4Slot 32bit+ BUS724 Rev.BA	
			Author	08.03.	Wiedmann		
			Check	08.03.	Hamann		
					DIN A4 M 1:1	Number	Sheet
			 HARTMANN ELEKTRONIK MOTORSTRASSE 43 D-70499 STUTTGART		Device: HE-C33RA04---4	File: BUS724BA	of
	Rev	Description	Date	Name			

TOP VIEW

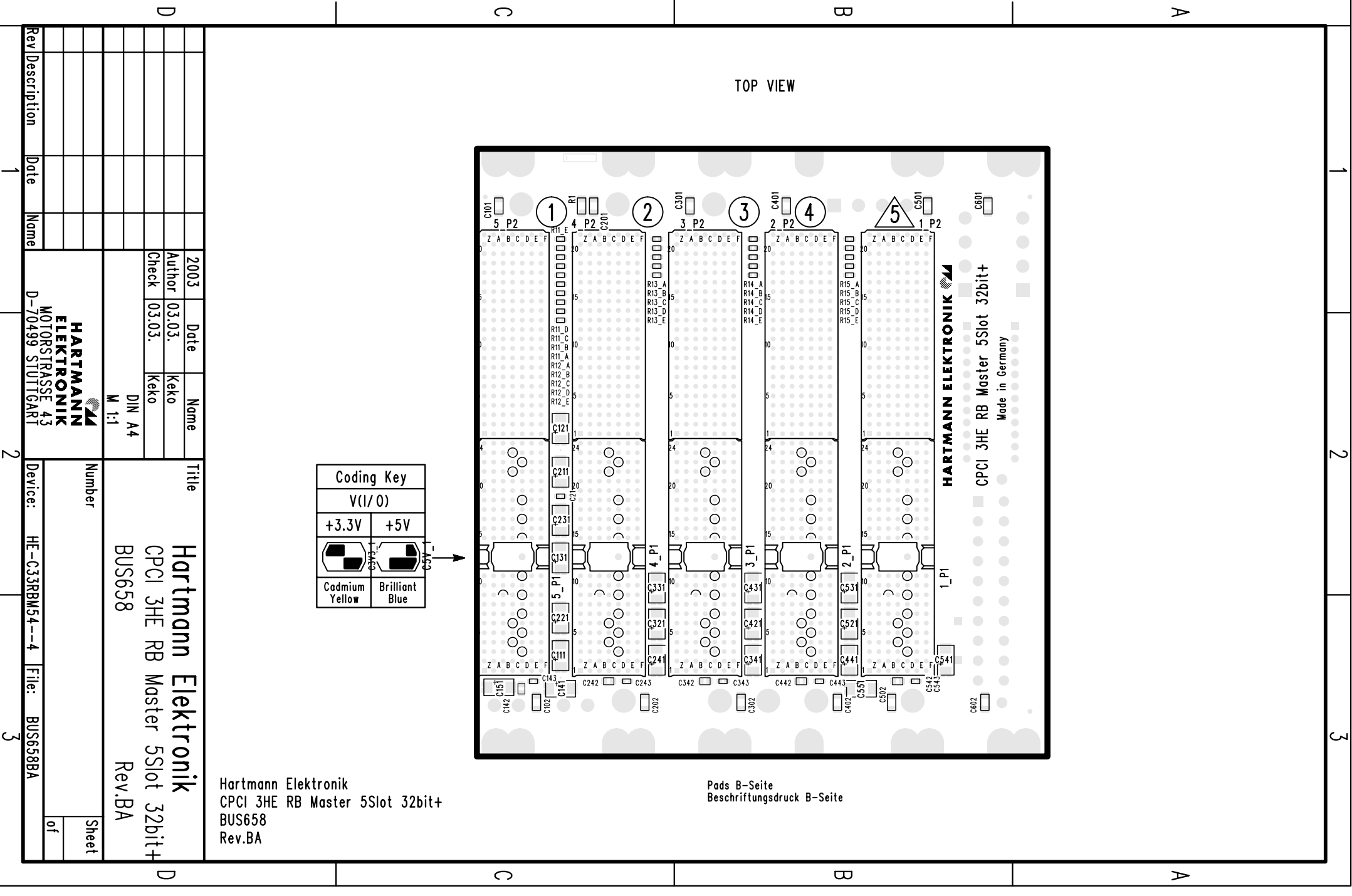


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				Author	03.03.	Keko	Hartmann Elektronik		HE-C33RBM54--4	BUS658BA	1 of
				Check	03.03.	Keko	CPCI 3HE RB Master 5Slot 32bit+				
							BUS658				
							Rev.BA				

Hartmann Elektronik
 CPCI 3HE RB Master 5Slot 32bit+
 BUS658
 Rev.BA

Pads B-Seite
 Beschriftungsdruck B-Seite

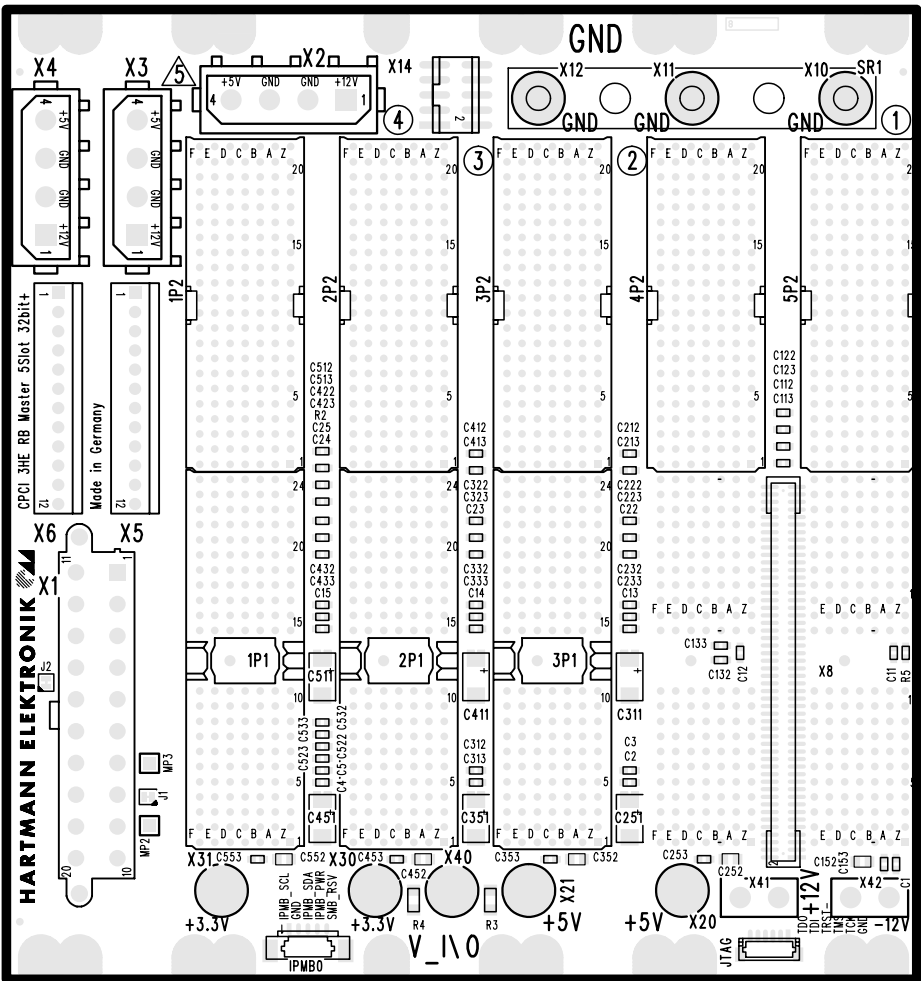
HARTMANN ELEKTRONIK
 CPCI 3HE RB Master 5Slot 32bit+
 Made in Germany



Without geographic addressing on request

BOTTOM VIEW

Floppy-Connector (X2) on request



Shrouds
1P1 - 3P1
on request

Busbar V(I/O) = 3,3V

Busbar V(I/O) = 5V

Pads L-Seite
Beschriftungsdruck L-Seite

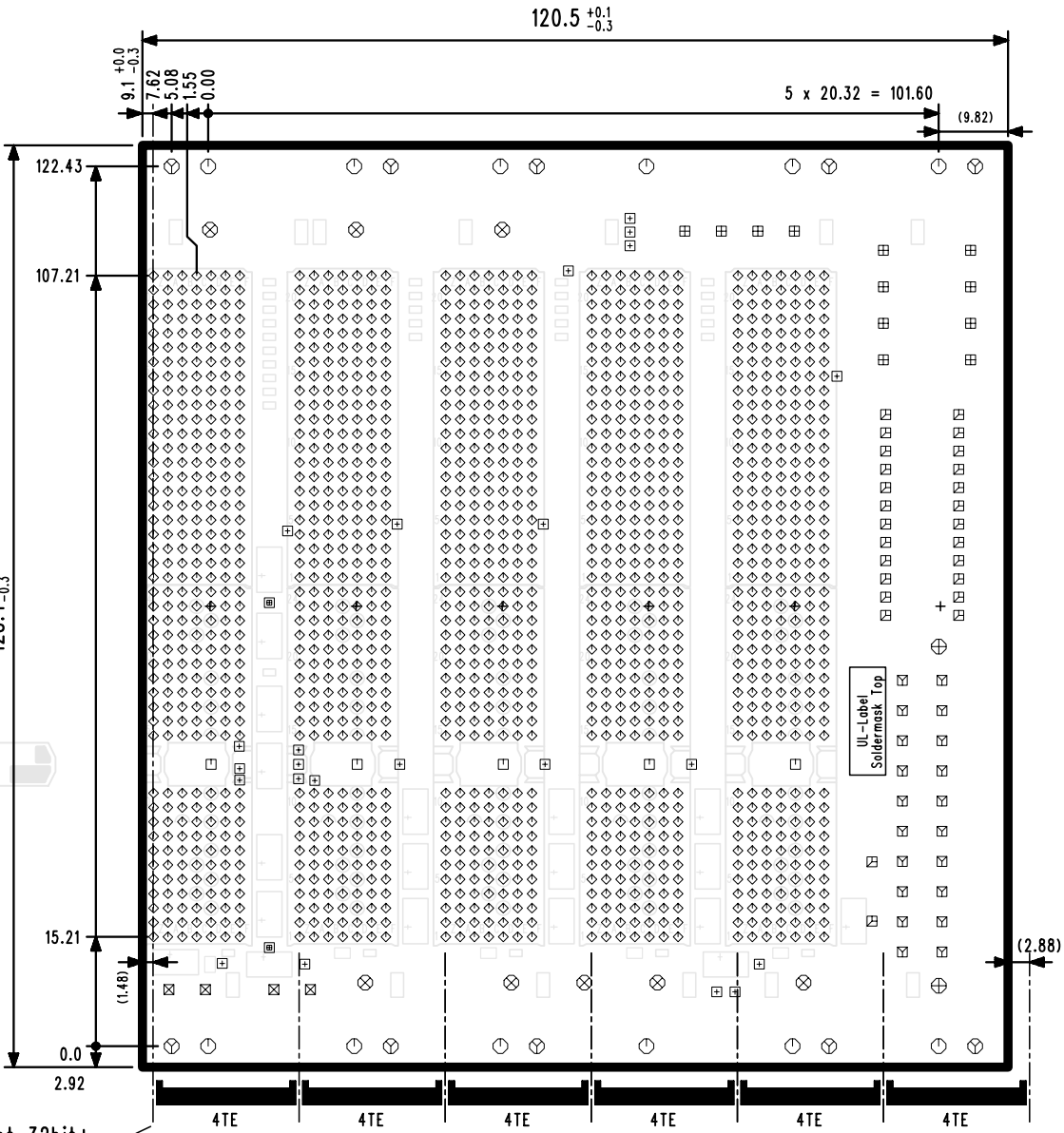
Rev.BA
BU2028
CPCI 3HE RB Master 2Slot 32bit+
Hartmann Elektronik

Rev	Description	Date	Name	Date	Name	Title	Number	Device:	File:
1				2003		Hartmann Elektronik		HE-C33RBM54--4	BUS658BA
				03.03.	Keko	CPCI 3HE RB Master 5Slot 32bit+			
				03.03.	Keko	BUS658			
						Rev.BA			

HARTMANN ELEKTRONIK
 MOTORSTRASSE 43
 D-70499 STUTTGART
 DIN A4
 M 1:1

Sheet
 of

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Common tolerance: +- 0.1 mm

Hartmann Elektronik
 CPCI 3HE RB Master 5Slot 32bit+
 BUS658
 Rev.BA
 Interboard Separation Plane

Rev Description		Date		Name		Device: HE-C33RBM54--4		File: BUS658BA	
1		1		1		2		3	
2003		Date		Name		Title			
Author		03.03.		Keko		Hartmann Elektronik			
Check		03.03.		Keko		CPCI 3HE RB Master 5Slot 32bit+			
				DIN A4		BUS658			
				M 1:1		Rev.BA			
						Number			
						Sheet			
						of			

D

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Rev Description	Date	Name

2001	Date	Name

Author	13.03.	Wiedmann

Check	13.03.	Hamann

	DIN A4	M 1:1

HARTMANN ELEKTRONIK	HARTMANN ELEKTRONIK	Title

MOTORSTRASSE 43 D-70499 STUTTGART	MOTORSTRASSE 43 D-70499 STUTTGART	Number

Device:	HE-C33RB06--14	File:

Rev Description	Date	Name

HE-C33RB06--14	HE-C33RB06--14	File:

HE-C33RB06--14	HE-C33RB06--14	File:

HE-C33RB06--14	HE-C33RB06--14	File:



HE-C33RB06--14	HE-C33RB06--14	File:

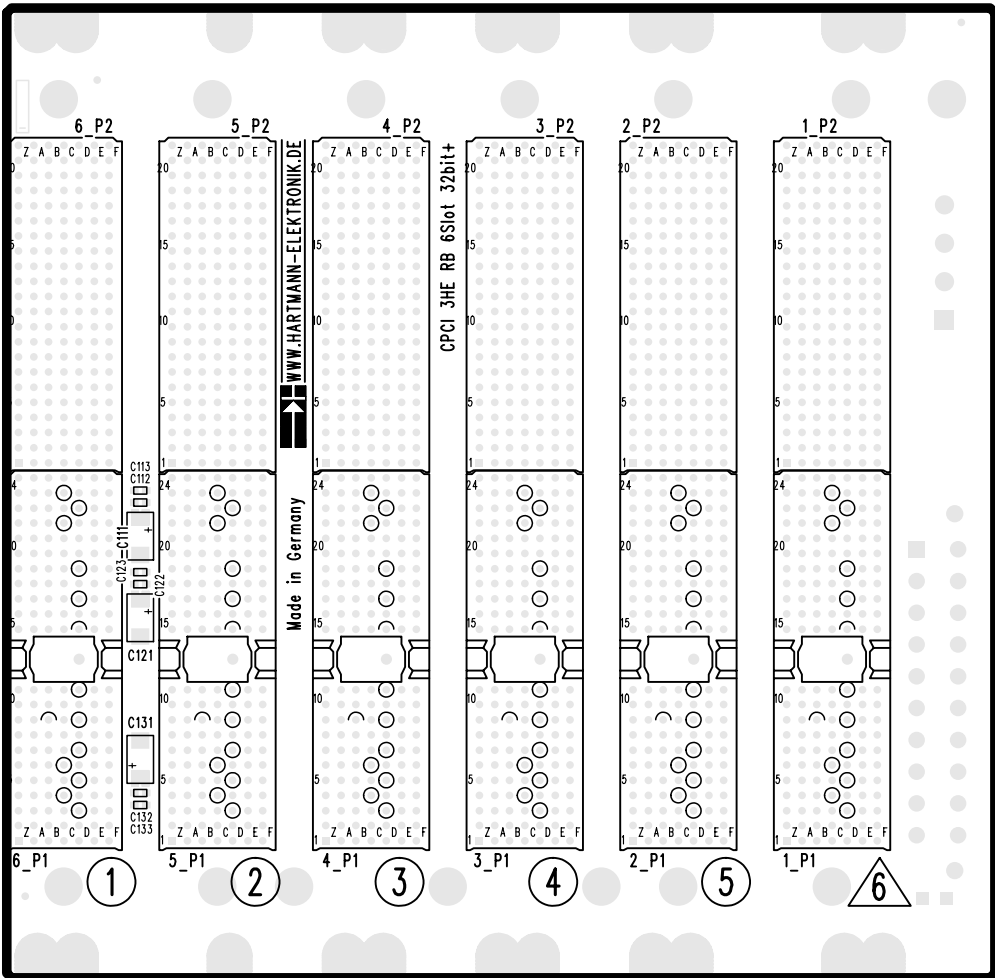
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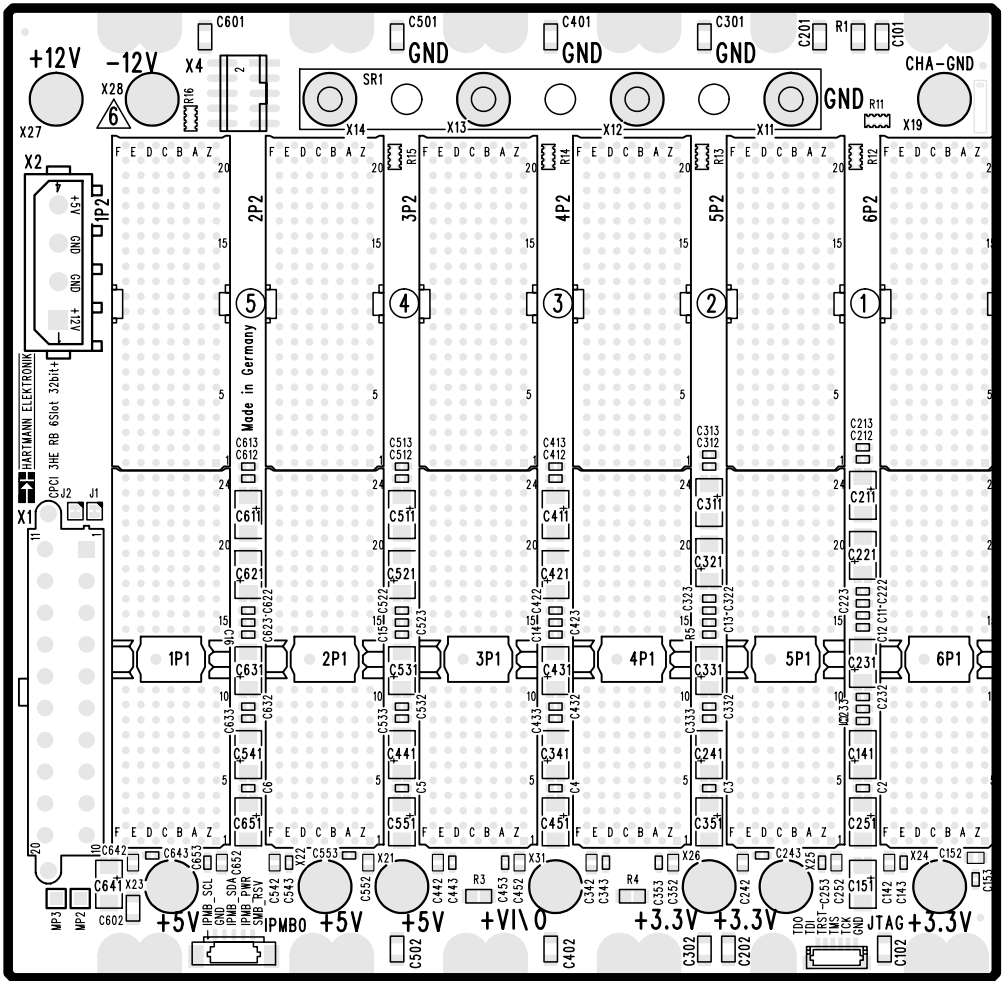
Coding Key	
V(I/O)	
+3.3V	+5V
	
Cadmium Yellow	Brilliant Blue



Hartmann Elektronik
CPCI 3HE RB 6Slot 32bit+
BUS722
Rev.BA

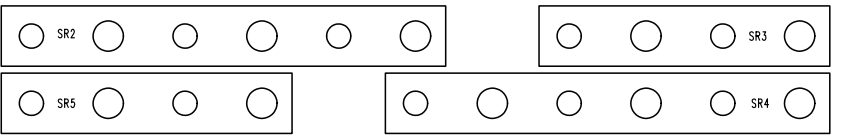
Hartmann Elektronik
CPCI 3HE RB 6Slot 32bit+
BUS722 Rev.BA

Silkscreen Top
Pods Top



Busbar for +5V keying

Busbar for +3.3V keying



Pads Bottom Silkscreen Bottom

Rev.BA
BUS222
CPCI 3HE RB 6Slot 32bit+
Hartmann Elektronik

Rev Description	Date	Name	2001	Date	Name	Title	Number	Sheet
			Author 13.03.	Wiedmann	Hartmann Elektronik MOTORSTRASSE 43 D-70499 STUTTGART			
			Check 13.03.	Hamann	DIN A4 M 1:1			

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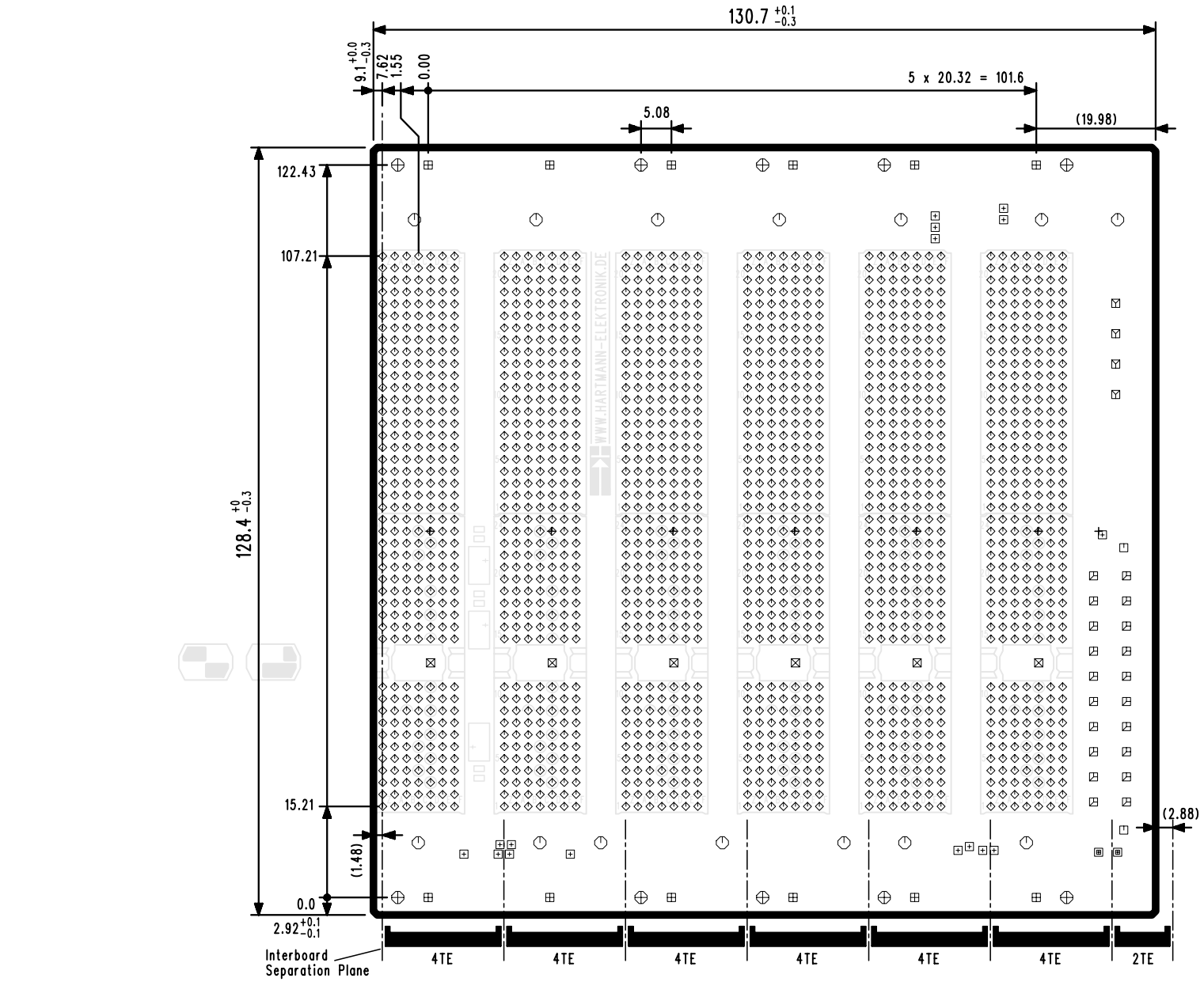
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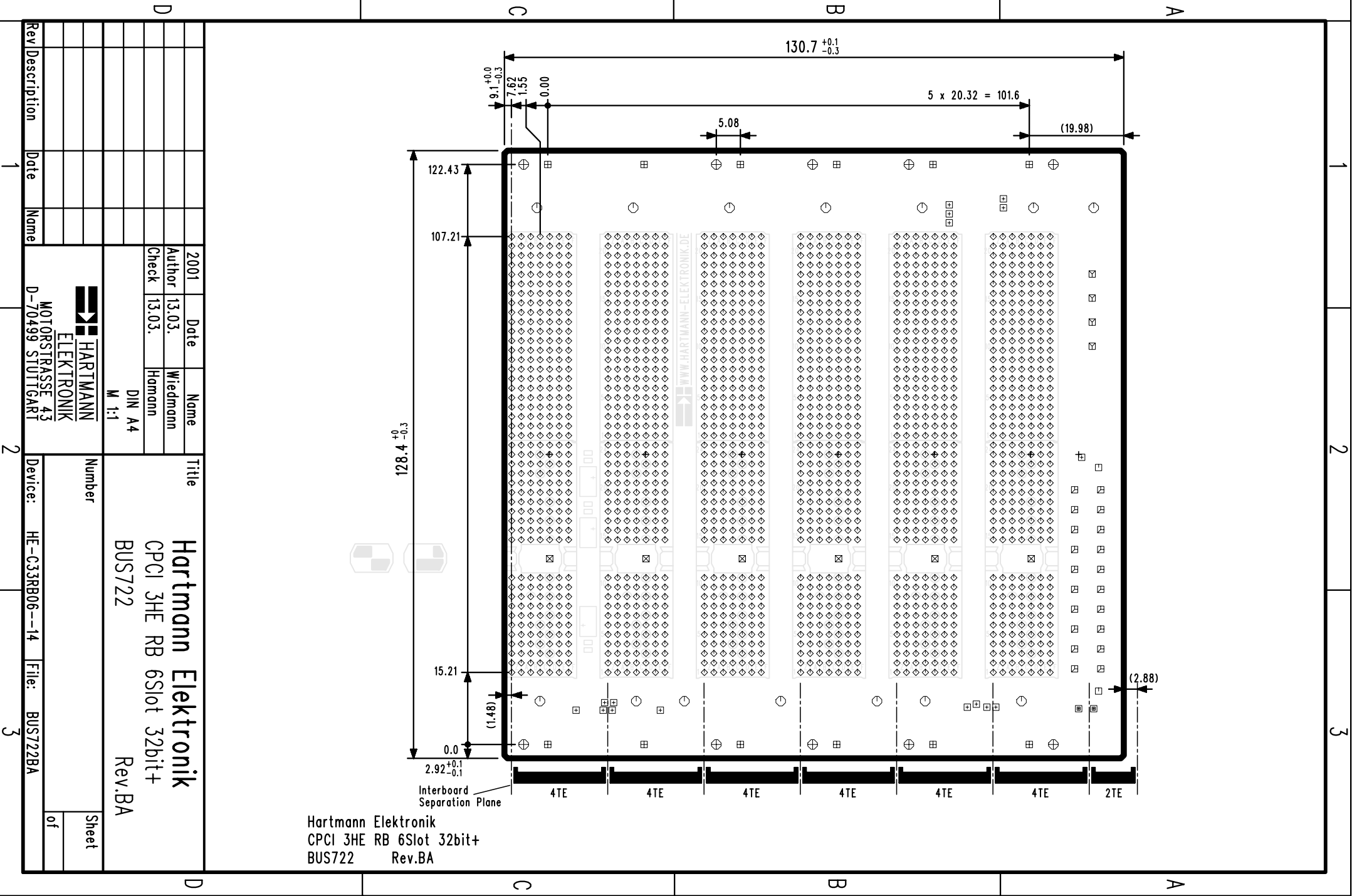
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Hartmann Elektronik
 CPC1 3HE RB 6Slot 32bit+
 BUS722 Rev.BA

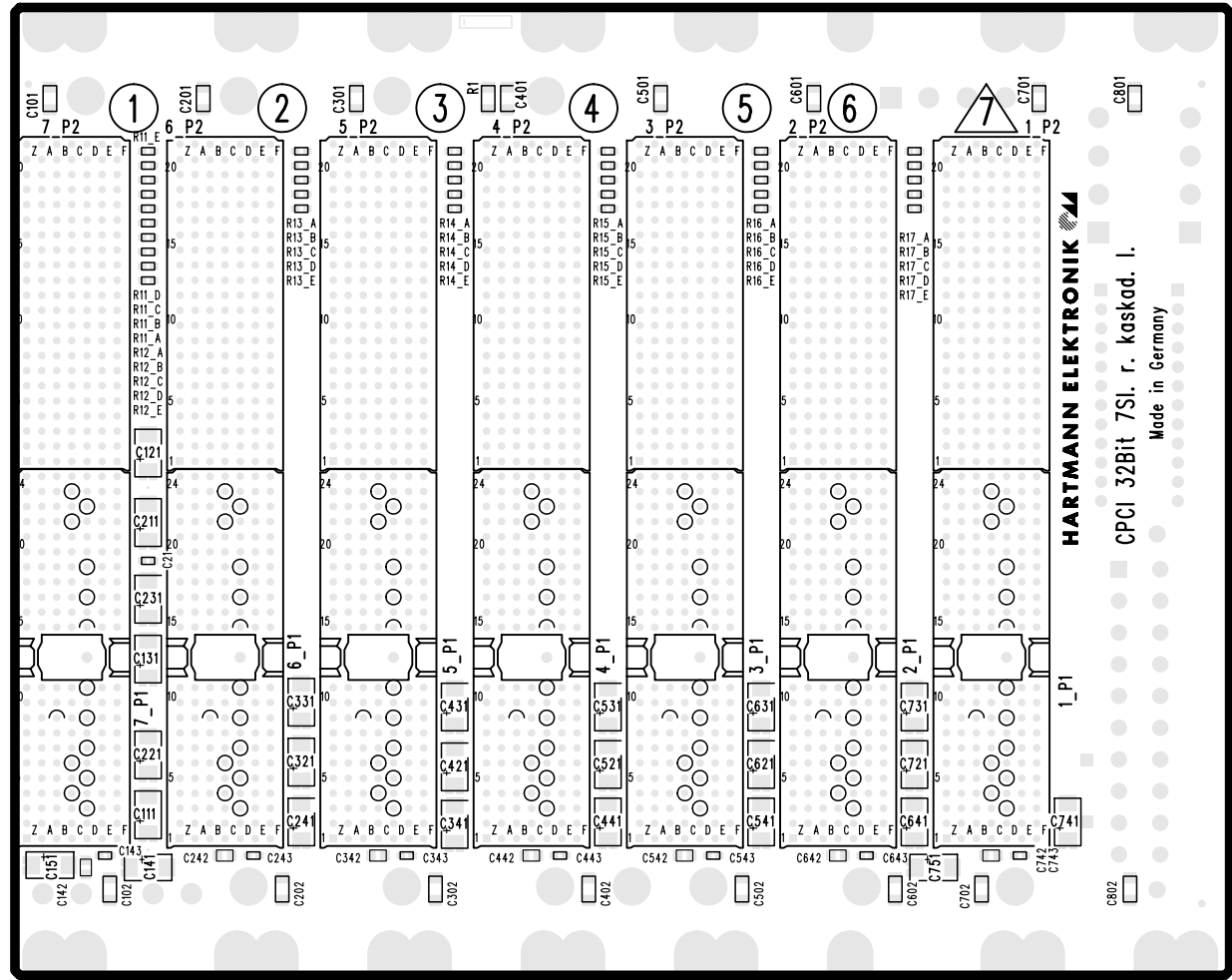
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			Author	13.03.	Wiedmann	Hartmann Elektronik CPC1 3HE RB 6Slot 32bit+ BUS722 Rev.BA
			Check	13.03.	Hamann	
					DIN A4 M 1:1	
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						HE-C33RB06--14
						File: BUS722BA
						Sheet
						of

HARTMANN ELEKTRONIK
 MOTORSTRASSE 43
 D-70499 STUTTGART



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TOP VIEW



Coding Key	
V(I/O)	
+3.3V	+5V
Cadmium Yellow	Brilliant Blue

Pads B-Seite
Beschriftungsdruck B-Seite

Hartmann Elektronik
CPCI 32Bit 7Sl. r. kaskad. I.
BUS650
Rev.BA

Rev	Description	Date	Name	2007	Date	Name	Title	Number	Device:	File:	Sheet
D				Author	30.01.	Wiedmann	Hartmann Elektronik CPCI 32Bit 7Sl. r. kaskad. I. Rev.BA			BUS650BA	of
				Check	30.01.	Wiedmann					
						DIN A4					
						M 1:1					

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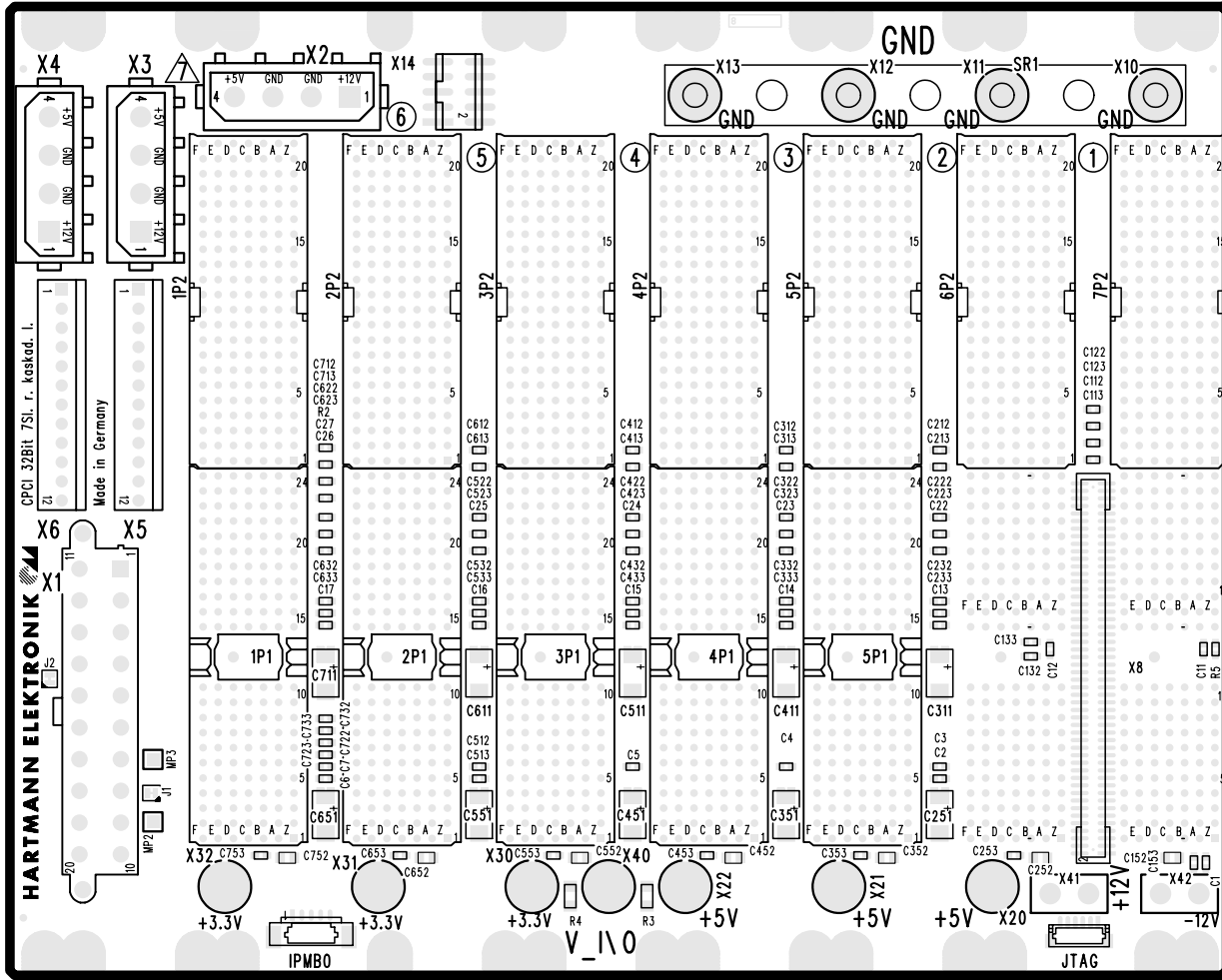
Without geographic addressing on request

X14 Pin Assignment

Pin	Signal	Pin	Signal
1	PRST-	2	FAL-
3	DEG-	4	+3.3V-Sense
5	+3.3V	6	GND-Sense (+3.3V)
7	+5V	8	+5V-Sense
9	GND	10	GND-Sense (+5V)

BOTTOM VIEW

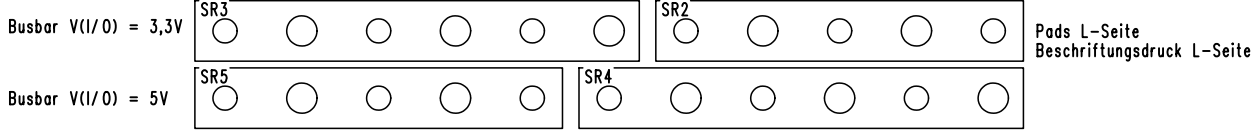
Floppy-Connector (X2) on request



Shrouds
1P1 - 3P1
on request

JTAG
Pin Assignment

Pin	Signal
1	GND
2	TCK
3	TMS
4	TRST-
5	TDI
6	TDO



Hartmann Elektronik
CPCI 32Bit 75l. r. Kaskad. I.
BUS650
Rev.BA

IPMBO
Pin Assignment

Pin	Signal
1	IPMB_SCL
2	GND
3	IPMB_SDA
4	IPMB_PWR
5	SMB_RSV

Rev	Description	Date	Name
0			
1			
2			
3			

Author	Date	Name	Title
2007			
30.01.		Wiedmann	Hartmann Elektronik
30.01.		Wiedmann	CPCI 32Bit 75l. r. Kaskad. I.
			BUS650
			Rev.BA

Device:	Number	File:	Sheet
HARTMANN ELEKTRONIK MOTORSTRASSE 43 D-70499 STUTTGART	M 1:1	BUS650BA	of

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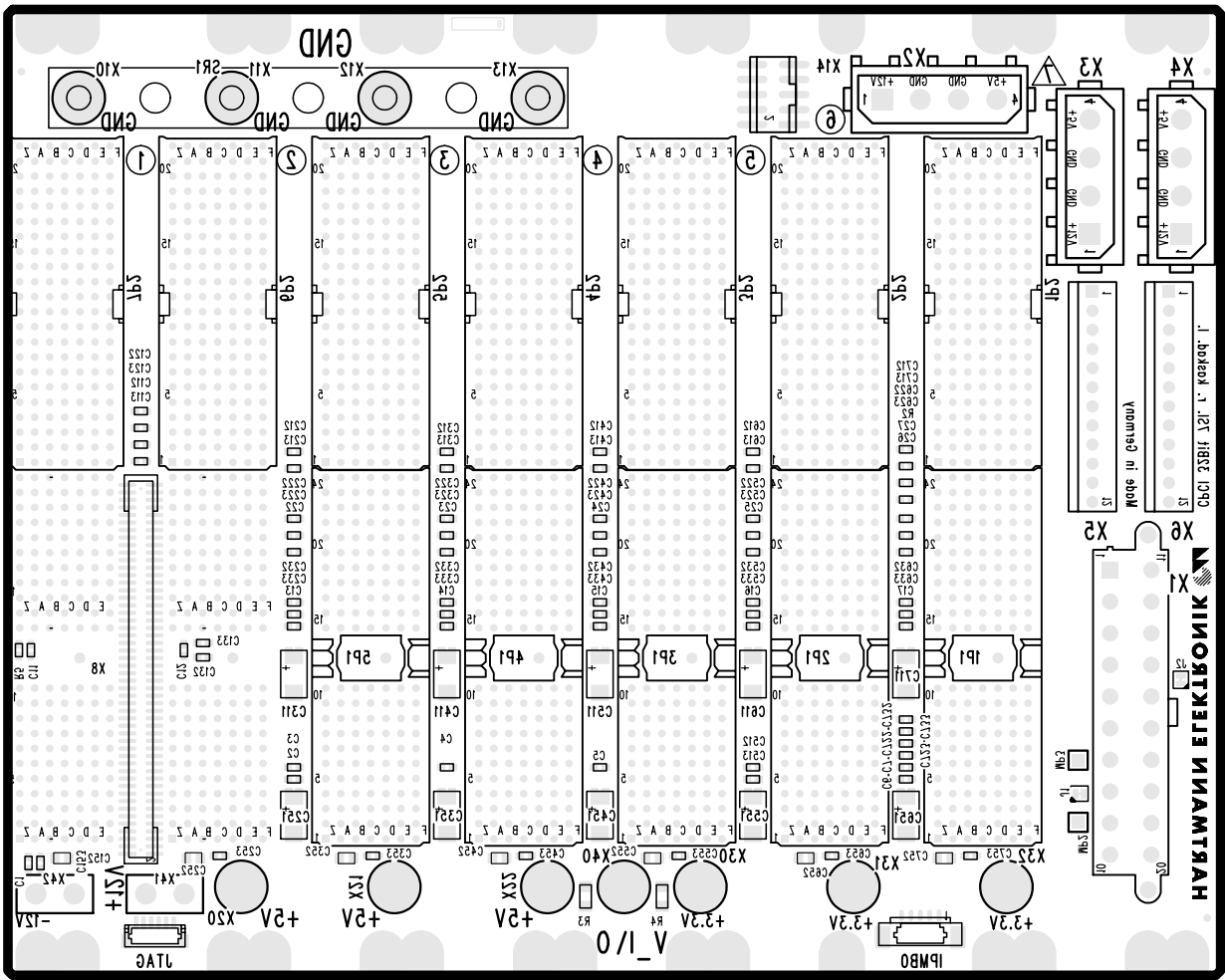
D

Without geographic addressing on request

floppy-Connector (XS) on request

Pin Assignment	Pin	Signal
1	FRST	-
2	FRST	-
3	FRST	-
4	+3V	-Sense
5	+3V	-Sense (+3V)
6	GND	-Sense (+3V)
7	+3V	-Sense
8	+3V	-Sense
9	GND	-Sense (+3V)

BOTTOM VIEW



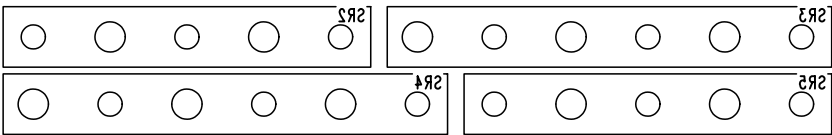
on request
1P1 - 3P1
2P1

Pin Assignment	Pin	Signal
1	GND	
2	FRST	
3	FRST	
4	FRST	
5	FRST	
6	FRST	
7	FRST	
8	FRST	
9	FRST	

Pin Assignment	Pin	Signal
1	FRST	
2	FRST	
3	FRST	
4	FRST	
5	FRST	
6	FRST	
7	FRST	
8	FRST	
9	FRST	

Bussp. V(I/O) = 3.3V

Bussp. V(I/O) = 5V



Beschreibungdruck L-Seite
Page L-2seite

Hartmann Elektronik
CPCI 32Bit 7Sl. r. kaskad. I.
BUS650
Rev.BA

Title

Hartmann Elektronik
CPCI 32Bit 7Sl. r. kaskad. I.
BUS650

Rev.BA

Name

Wiedmann

Wiedmann

DIN A4
M 1:1

Date

2007

30.01.

30.01.

Date

2007

30.01.

30.01.

Rev Description

1
2
3
4
5
6
7
8
9
10
11
12

Sheet

of

File: BUS650BA

Device:

HARTMANN ELEKTRONIK
MOTORSTRASSE 43
D-70499 STUTTGART

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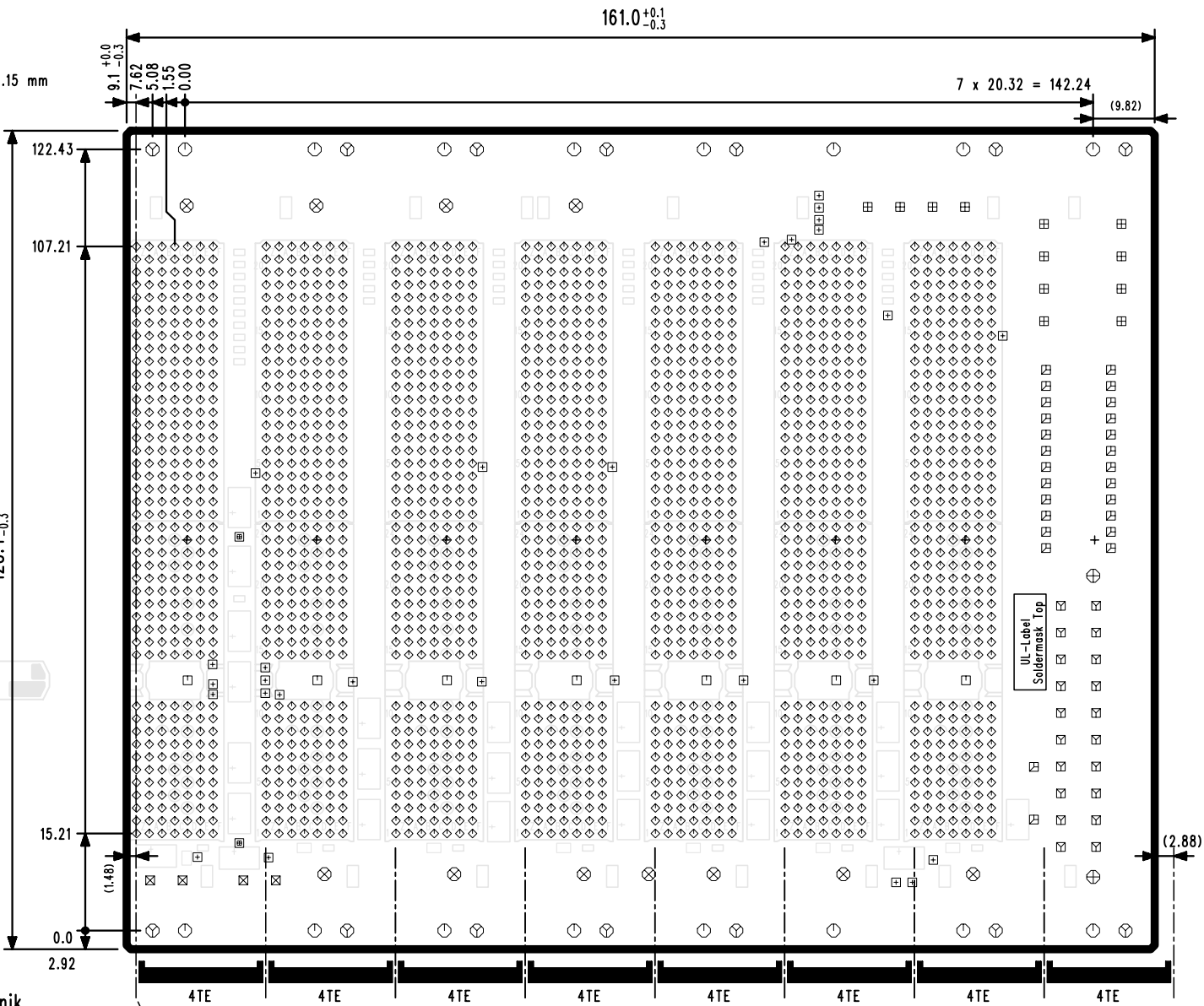
A

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Common tolerance: +/- 0.15 mm

Hartmann Elektronik
CPCI 32Bit 7Sl. r. kaskad. I.
BUS650
Rev.BA

Interboard
Separation Plane

UL-Label
Soldermask Top

Rev Description		Date	Name	2007	Date	2007	Date	30.01.	Wiedmann	Name	Wiedmann	Title	Hartmann Elektronik	
1								30.01.				CPCI 32Bit 7Sl. r. kaskad. I.	2	
D									DIN A4			BUS650	3	
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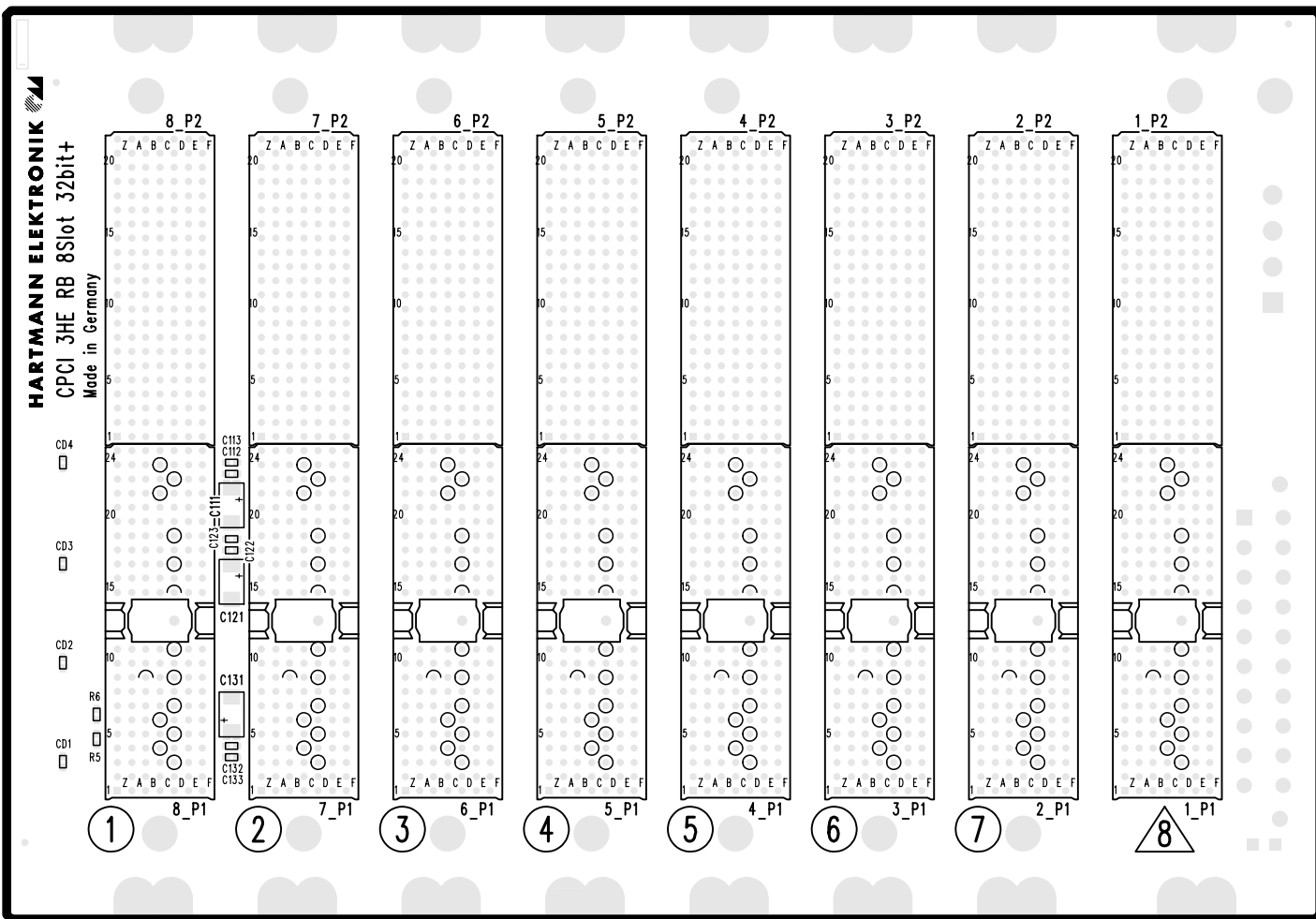
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Rev Description	Date	Name

2006	Date	Name

HARTMANN ELEKTRONIK MOTORSTRASSE 43 D-70499 STUTTGART	Author 05.12. Wiedmann Check 05.12. Wiedmann DIN A4 M 1:1	Date 05.12.2006 Name Wiedmann	Title Hartmann Elektronik CPCI 3HE RB 8Slot 32bit+ BUS720 Rev.BB
Device: HE-C33RB08--14 File: BUS720BB	Number	Title	Sheet of

Coding Key	
V(I/O)	
+	+
■	■
Cadmium Yellow	Brilliant Blue



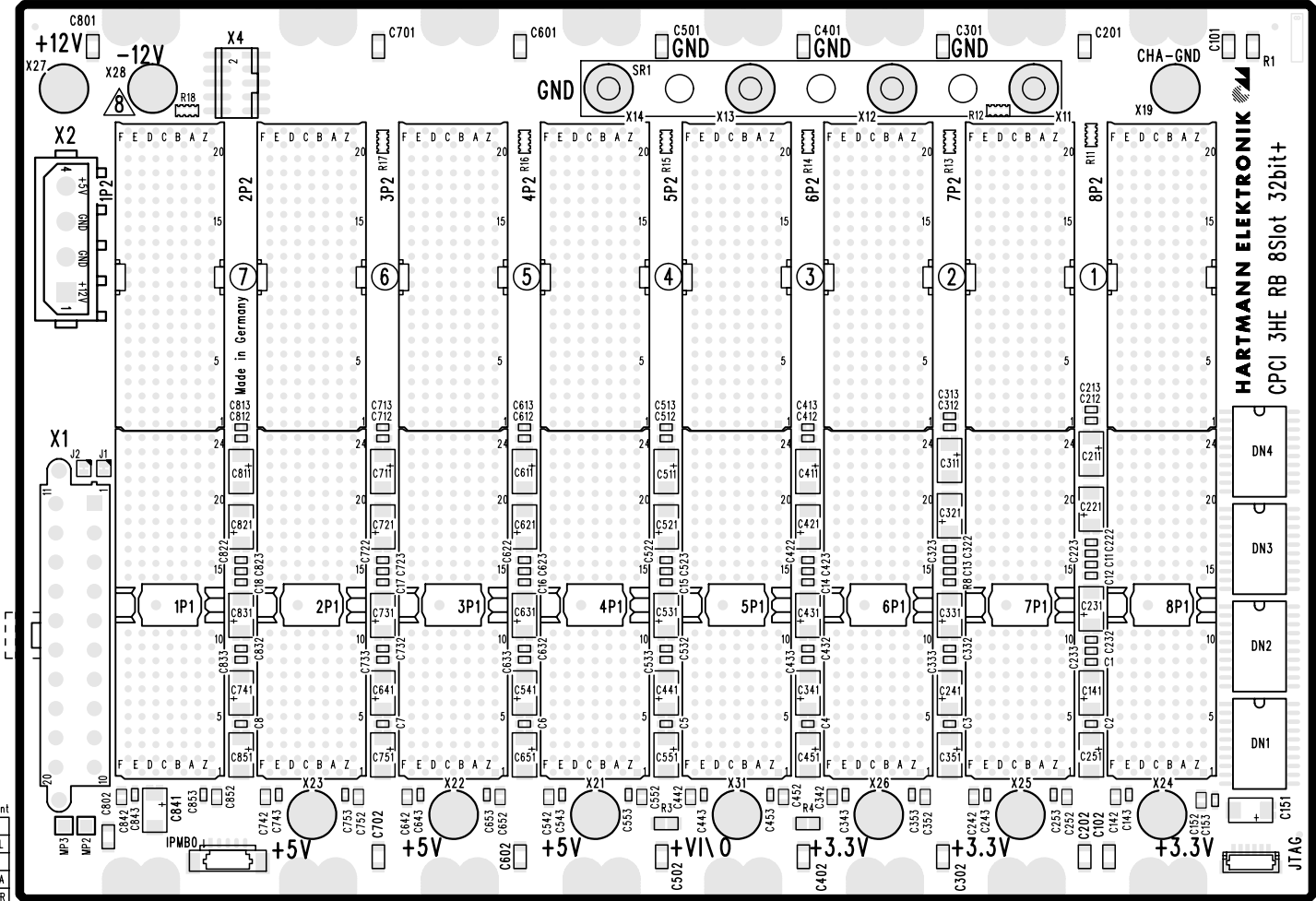
Hartmann Elektronik
CPCI 3HE RB 8Slot 32bit+
BUS720 Rev.BB

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X4 Pin Assignment

Pin	Signal	Pin	Signal
1	PRST-	2	FAL-
3	DEG-	4	+3.3V-Sense
5	+3.3V	6	GND-Sense (+3.3V)
7	+5V	8	+5V-Sense
9	GND	10	GND-Sense (+5V)

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					05.12.	Wiedmann	Hartmann Elektronik CPCI 3HE RB 8Slot 32bit+	DIN A4			



IPMB0 Pin Assignment

Pin	Signal
1	IPMB_SCL
2	GND
3	IPMB_SDA
4	IPMB_PWR
5	SMB_RSTV

JTAG Pin Assignment

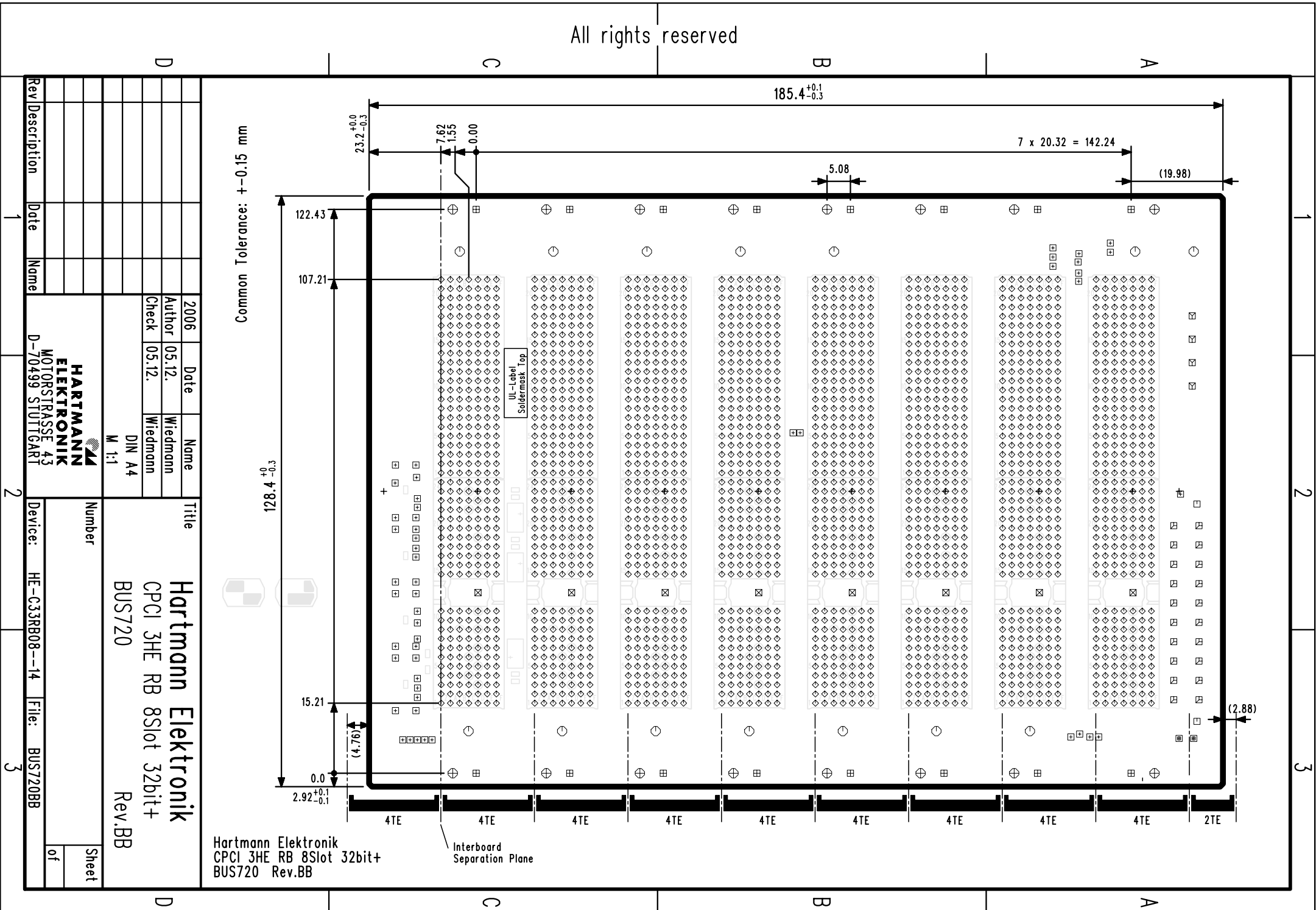
Pin	Signal
1	GND
2	TCK
3	TMS
4	TRST-
5	TDI
6	TDO

Busbar V(I/O) = 3.3V

Busbar V(I/O) = 5V

Silkscreen Bottom Pads Bottom

BUS720 Rev.BB
CPCI 3HE RB 8Slot 32bit+
Hartmann Elektronik



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CPCI 3HE RB 8Slot 32bit+
BUS720 Rev.BB

Interboard
Separation Plane

Soldermask Top

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