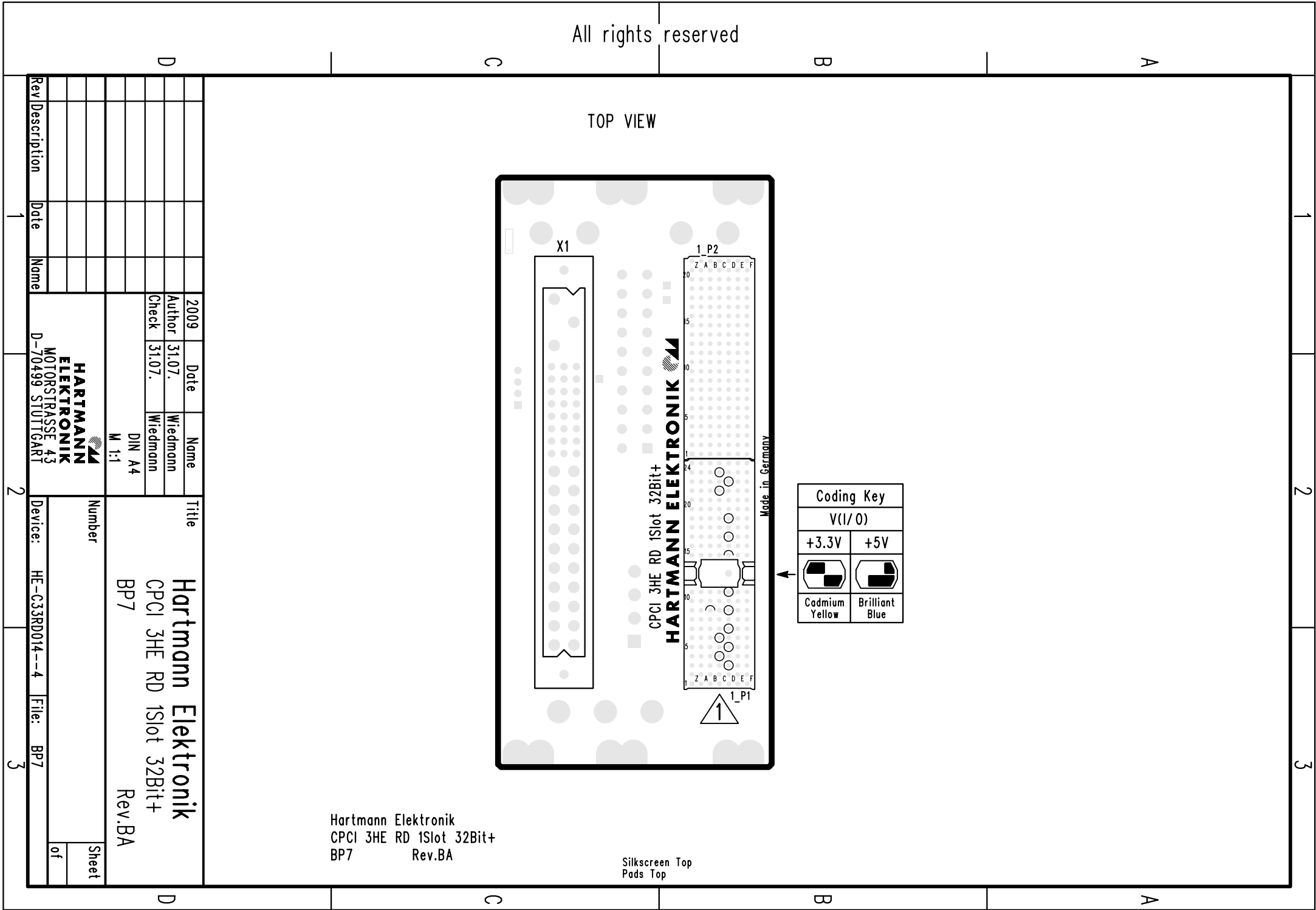


[illegible][illegible]

1 2 3

A B C D

TOP VIEW

The diagram shows a rectangular PCB layout. At the top, there is a header with '1 2 3' and 'A B C D'. Below this, the text 'TOP VIEW' is centered. The main area contains a detailed layout of the PCB. It features a central rectangular area with a grid of dots. To the left of this grid is a long, narrow rectangular area labeled 'X1'. To the right is a vertical rectangular area labeled '1 P2' with a grid of dots and a small triangle labeled '1'. Below the central grid is a horizontal rectangular area labeled '1 P1' with a grid of dots. The text 'HARTMANN ELEKTRONIK' is printed vertically on the right side. The text 'CPCI 3HE RD 1Slot 32Bit+' is printed horizontally below the central grid. The text 'Made in Germany' is printed vertically on the right side. A 'Coding Key' table is located on the right side, showing two columns: '+3.3V' and '+5V', and two rows: 'Cadmium Yellow' and 'Brilliant Blue'. The table shows the corresponding color codes for each combination. The text 'Hartmann Elektronik' is printed at the bottom left. The text 'CPCI 3HE RD 1Slot 32Bit+' is printed at the bottom center. The text 'Rev.BA' is printed at the bottom right. The text 'Silkscreen Top Pads Top' is printed at the bottom center.

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

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

Silkscreen Top Pads Top

Rev Description Date Name

2009 31.07. Wiedmann

Author 31.07. Wiedmann

Check 31.07. Wiedmann

DIN A4

M 1:1

Number

Hartmann Elektronik

CPCI 3HE RD 1Slot 32Bit+ BP7

Rev.BA

Device: HE-C33RD014--4 File: BP7

Sheet of

1 2 3

A B C D

1 2 3

A B C D

TOP VIEW

The diagram shows a rectangular PCB layout. At the top, there is a header with '1 2 3' and 'A B C D'. Below this, the text 'TOP VIEW' is centered. The main area contains a detailed layout of the PCB. It features a central rectangular area with a grid of dots, representing a component array. To the left of this area is a long, narrow rectangular section labeled 'X1'. To the right is a section labeled '1 P2' with a grid of dots and a '1 P1' label. A 'Coding Key' table is located to the right of the main area, showing 'V(I/O)' with '+3.3V' and '+5V' options, and 'Cadmium Yellow' and 'Brilliant Blue' color codes. The bottom of the diagram includes a title block with 'Hartmann Elektronik', 'CPCI 3HE RD 1Slot 32Bit+', 'BP7', 'Rev.BA', and a table for 'Sheet of'. The text 'Hartmann Elektronik CPCI 3HE RD 1Slot 32Bit+ BP7 Rev.BA' is also present at the bottom center. The text 'All rights reserved' is at the bottom right. The text 'Silkscreen Top Pads Top' is at the bottom left.

1 P2

1 P1

X1

HARTMANN ELEKTRONIK

CPCI 3HE RD 1Slot 32Bit+

Made in Germany

Coding Key

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

Hartmann Elektronik
CPCI 3HE RD 1Slot 32Bit+
BP7 Rev.BA

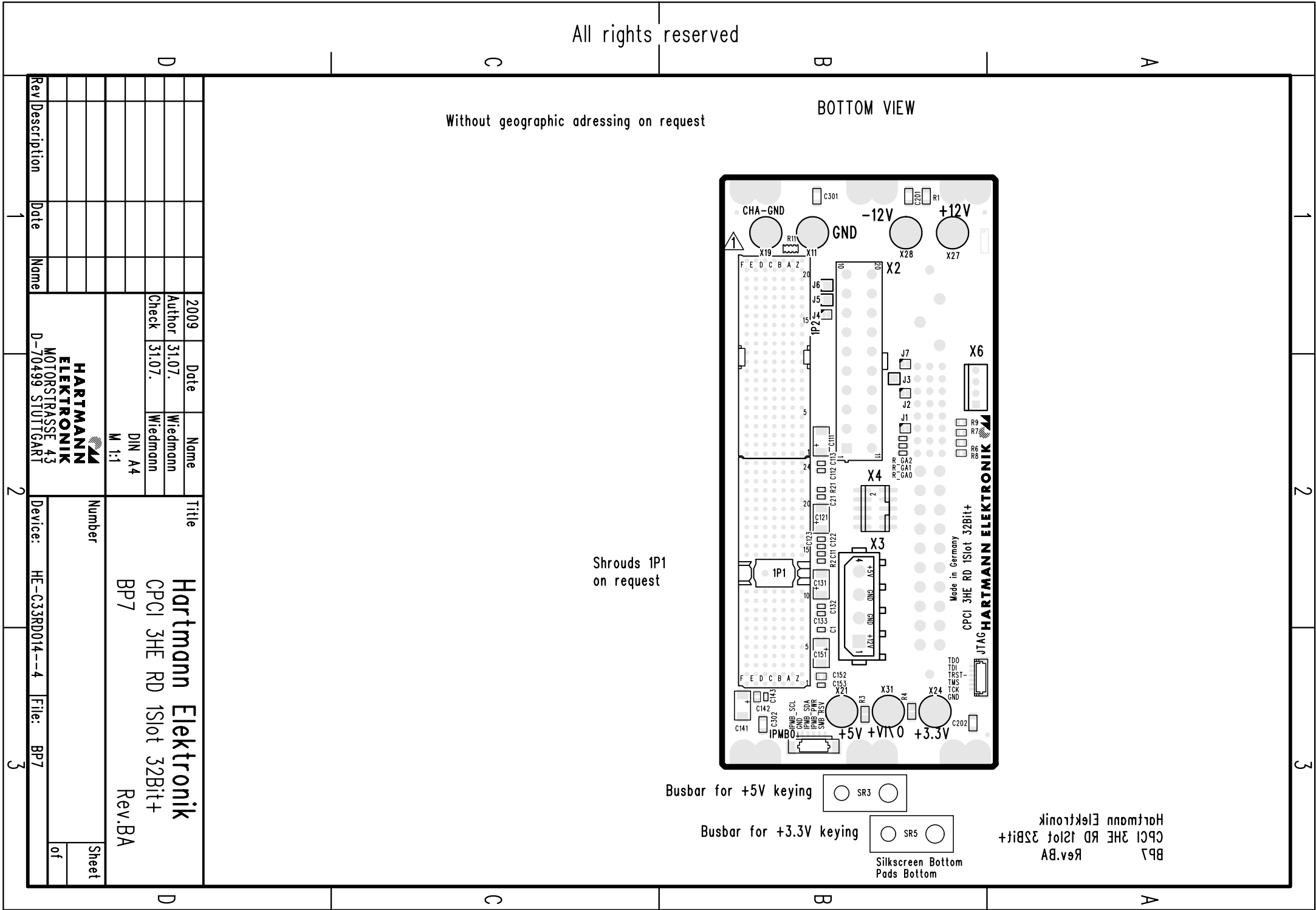
Rev.BA

Sheet of

All rights reserved

Silkscreen Top Pads Top

[illegible]

[illegible][illegible][illegible]

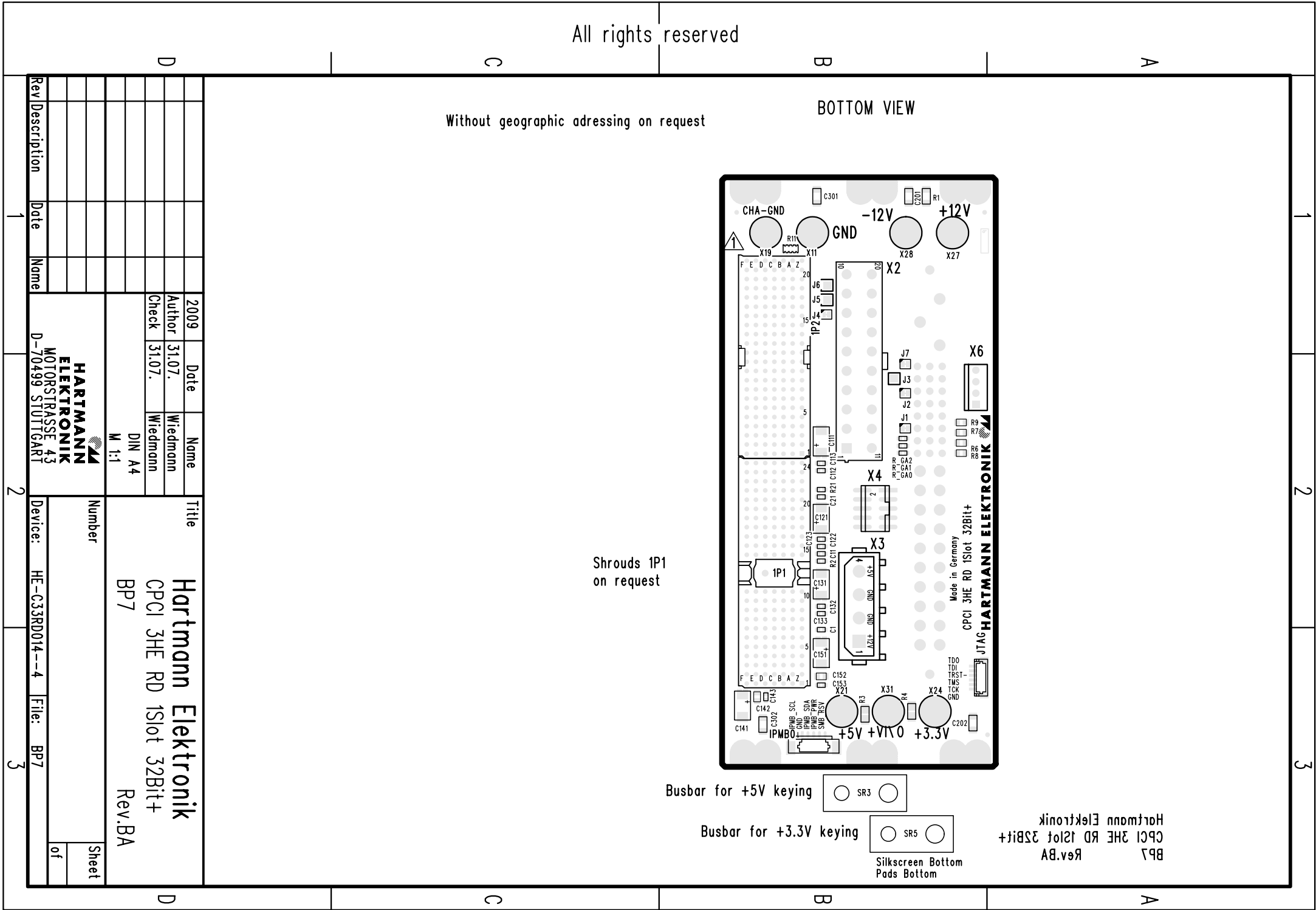
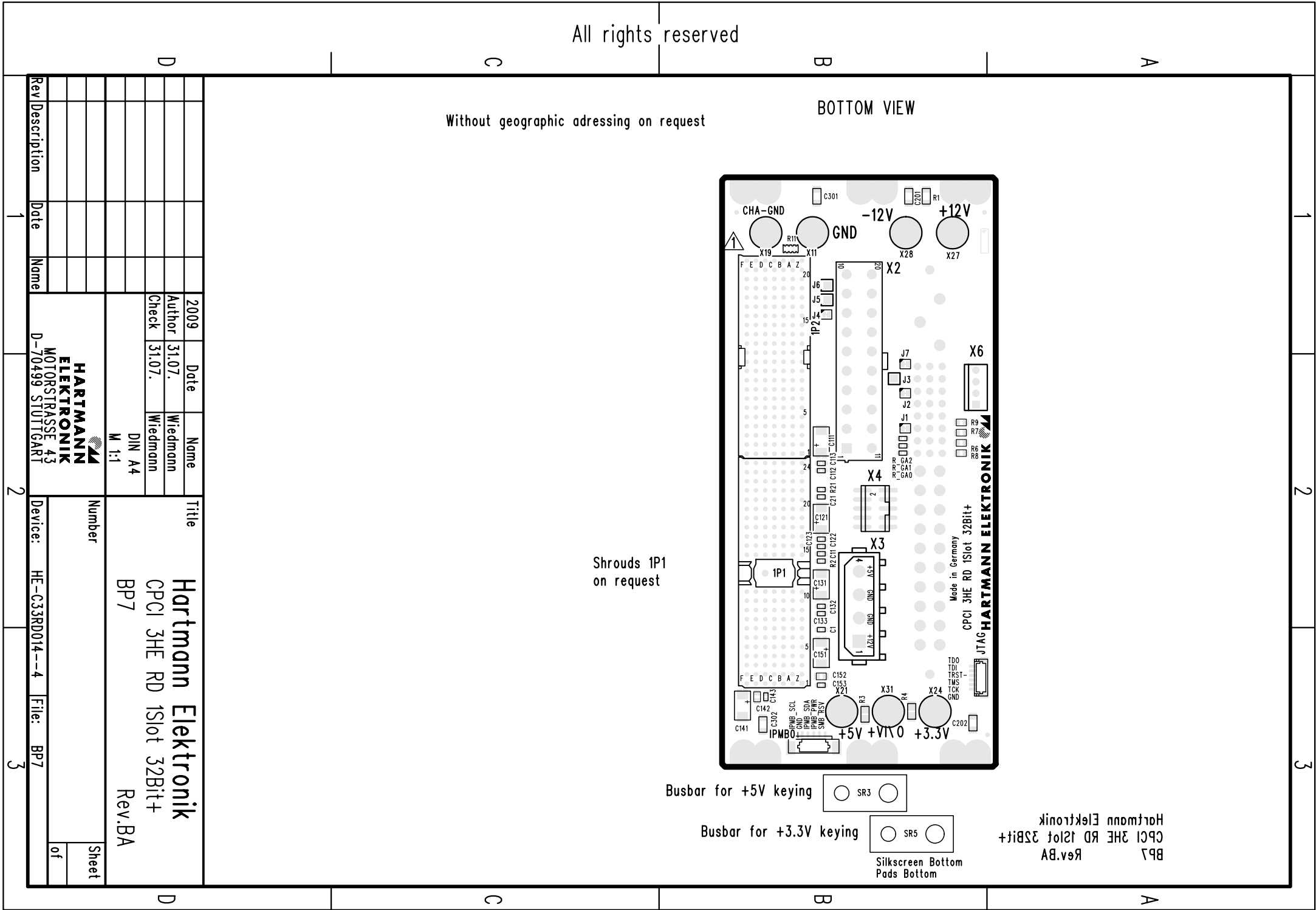
1
2
3

A
B
C
D

Without geographic addressing on request

Shrouds 1P1 on request

BOTTOM VIEW

[illegible][illegible][illegible][illegible]

1 2 3

A B C D

All rights reserved

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

59.6 $^{+0.0}_{-0.3}$

49.80 $^{+0.0}_{-0.3}$

48.26

40.64

33.24

20.32

5.08

1.55

0.00

(9.87)

122.43

107.21

105.21

128.4 $^{+0}_{-0.3}$

17.21

15.21

0.0

2.92

Interboard Separation Plane

8TE

4TE

(2.88)

(1.48)

Ul-Label Soldermask Bot.

2009

31.07.

31.07.

Wiedmann

Wiedmann

DIN A4

M 1:1

Hartmann Elektronik

MOTORSTRASSE 43

D-70499 STUTTGART

HE-C33RD014--4

BP7

BP7

Rev.BA

Hartmann Elektronik

CPCI 3HE RD 1Slot 32Bit+

BP7

Rev.BA

Rev Description

Date

Name

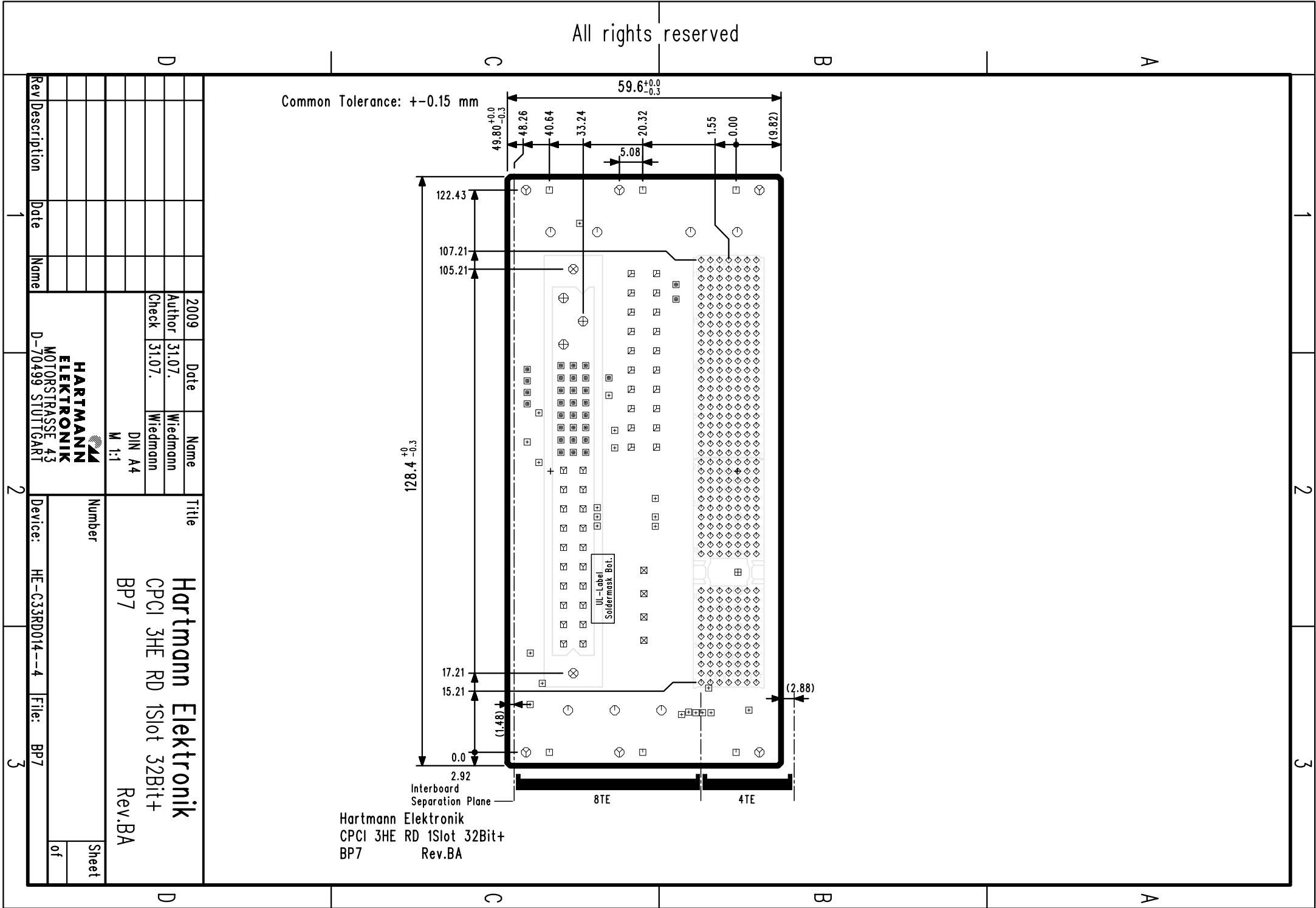
1

2

3

Sheet

of

[illegible]

1 2 3

A B C D

All rights reserved

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

59.6 $^{+0.0}_{-0.3}$

49.80 $^{+0.0}_{-0.3}$

48.26

40.64

33.24

20.32

5.08

1.55

0.00

(9.87)

122.43

107.21

105.21

128.4 $^{+0}_{-0.3}$

17.21

15.21

0.0

2.92

Interboard Separation Plane

8TE

4TE

(2.88)

(1.48)

Ul-Label Soldermask Bot.

Hartmann Elektronik
CPCI 3HE RD 1Slot 32Bit+
BP7
Rev.BA

Hartmann Elektronik
MOTORSTRASSE 43
D-70499 STUTTGART

2009

31.07.

31.07.

Wiedmann

Wiedmann

DIN A4

M 1:1

Number

Title

Hartmann Elektronik
CPCI 3HE RD 1Slot 32Bit+
BP7
Rev.BA

Rev Description

Date

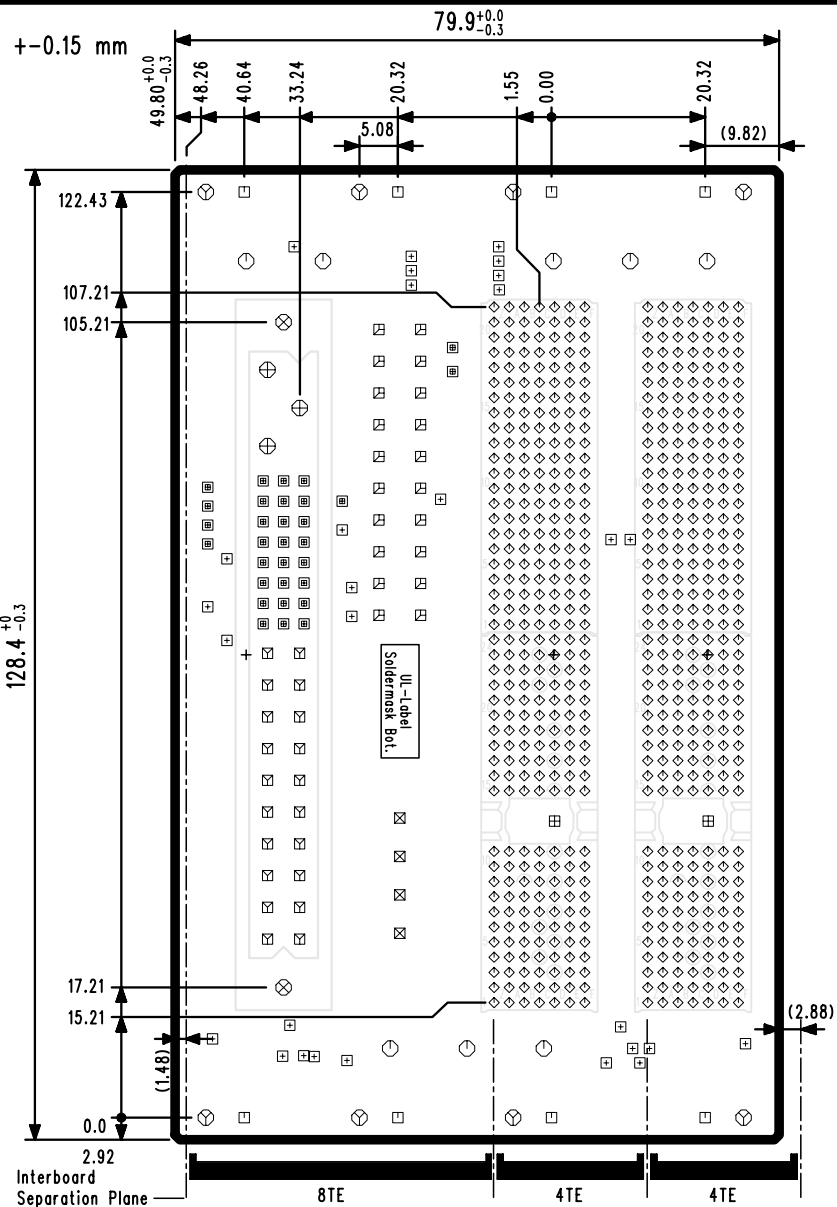
Name

1

2

3

Sheet of



Hartmann Elektronik
CPCI 3HE RD 2Slot 32Bit+
BP6 Rev.BA

					2009	Date	Name	Title Hartmann Elektronik CPCI 3HE RD 2Slot 32Bit+ BP6 Rev.BA	Number	Sheet
					Author	28.07.	Wiedmann			
					Check	28.07.	Wiedmann			
					DIN A4 M 1:1					

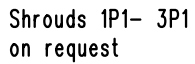
The diagram illustrates the pin configurations for three different connector types: X1, 3_P2, 2_P2, and 1_P2. The X1 connector is shown as a single row of pins. The 3_P2, 2_P2, and 1_P2 connectors are shown as three rows of pins, each with a different number of pins per row. The diagram also includes the HARTMANN ELEKTRONIK logo, the text "CPCI 3HE RD 3Slot 32Bit+", and "Made in Germany".

↑

Silkscreen Top
Pads Top

Sheet	of
-------	----

BOTTOM VIEW



☐ SR3 ☐ ☐

☐ SR5 ☐ ☐

BU2845 Rev.BA
CPCI 3HE RD Slot 32Bit+
Hartmann Elektronik

[illegible]

1 2 3

A B C D

Common Tolerance: ± 0.15 mm

100.2 $^{+0.0}_{-0.3}$

49.80 $^{+0.0}_{-0.3}$

48.26

40.64

33.24

20.32

1.55

0.00

4 x 20.32 = 81.28

5.08

(9.82)

122.43

107.21

105.21

128.4 $^{+0}_{-0.3}$

17.21

15.21

0.0

2.92

Interboard Separation Plane

8TE

4TE

4TE

4TE

(2.88)

(1.48)

UL-Label
Soldermask Bot.

Hartmann Elektronik
CPCI 3HE RD 3Slot 32Bit+
BUS845 Rev.BA

2004
10.09.
10.09.
DIN A4
M 1:1

Hartmann Elektronik
MOTORSTRASSE 43
D-70499 STUTTGART

Rev Description Date Name

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28

29

30

31

32

33

34

35

36

37

38

39

40

41

42

43

44

45

46

47

48

49

50

51

52

53

54

55

56

57

58

59

60

61

62

63

64

65

66

67

68

69

70

71

72

73

74

75

76

77

78

79

80

81

82

83

84

85

86

87

88

89

90

91

92

93

94

95

96

97

98

99

100

101

102

103

104

105

106

107

108

109

110

111

112

113

114

115

116

117

118

119

120

121

122

123

124

125

126

127

128

129

130

131

132

133

134

135

136

137

138

139

140

141

142

143

144

145

146

147

148

149

150

151

152

153

154

155

156

157

158

159

160

161

162

163

164

165

166

167

168

169

170

171

172

173

174

175

176

177

178

179

180

181

182

183

184

185

186

187

188

189

190

191

192

193

194

195

196

197

198

199

200

201

202

203

204

205

206

207

208

209

210

211

212

213

214

215

216

217

218

219

220

221

222

223

224

225

226

227

228

229

230

231

232

233

234

235

236

237

238

239

240

241

242

243

244

245

246

247

248

249

250

251

252

253

254

255

256

257

258

259

260

261

262

263

264

265

266

267

268

269

270

271

272

273

274

275

276

277

278

279

280

281

282

283

284

285

286

287

288

289

290

291

292

293

294

295

296

297

298

299

300

301

302

303

304

305

306

307

308

309

310

311

312

313

314

315

316

317

318

319

320

321

322

323

324

325

326

327

328

329

330

331

332

333

334

335

336

337

338

339

340

341

342

343

344

345

346

347

348

349

350

351

352

353

354

355

356

357

358

359

360

361

362

363

364

365

366

367

368

369

370

371

372

373

374

375

376

377

378

379

380

381

382

383

384

385

386

387

388

389

390

391

392

393

394

395

396

397

398

399

400

401

402

403

404

405

406

407

408

409

410

411

412

413

414

415

416

417

418

419

420

421

422

423

424

425

426

427

428

429

430

431

432

433

434

435

436

437

438

439

440

441

442

443

444

445

446

447

448

449

450

451

452

453

454

455

456

457

458

459

460

461

462

463

464

465

<

1 2 3

A B C D

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

100.2 $^{+0.0}_{-0.3}$

49.80 $^{+0.0}_{-0.3}$

48.26

40.64

33.24

20.32

1.55

0.00

4 x 20.32 = 81.28

5.08

(9.82)

122.43

107.21

105.21

128.4 $^{+0}_{-0.3}$

17.21

15.21

0.0

2.92

Interboard Separation Plane

8TE

4TE

4TE

4TE

(2.88)

(1.48)

UL-Label
Soldermask Bot.

Hartmann Elektronik
CPCI 3HE RD 3Slot 32Bit+
BUS845 Rev.BA

2004
10.09.
10.09.
DIN A4
M 1:1

Hartmann Elektronik
MOTORSTRASSE 43
D-70499 STUTTGART

Rev Description Date Name

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28

29

30

31

32

33

34

35

36

37

38

39

40

41

42

43

44

45

46

47

48

49

50

51

52

53

54

55

56

57

58

59

60

61

62

63

64

65

66

67

68

69

70

71

72

73

74

75

76

77

78

79

80

81

82

83

84

85

86

87

88

89

90

91

92

93

94

95

96

97

98

99

100

101

102

103

104

105

106

107

108

109

110

111

112

113

114

115

116

117

118

119

120

121

122

123

124

125

126

127

128

129

130

131

132

133

134

135

136

137

138

139

140

141

142

143

144

145

146

147

148

149

150

151

152

153

154

155

156

157

158

159

160

161

162

163

164

165

166

167

168

169

170

171

172

173

174

175

176

177

178

179

180

181

182

183

184

185

186

187

188

189

190

191

192

193

194

195

196

197

198

199

200

201

202

203

204

205

206

207

208

209

210

211

212

213

214

215

216

217

218

219

220

221

222

223

224

225

226

227

228

229

230

231

232

233

234

235

236

237

238

239

240

241

242

243

244

245

246

247

248

249

250

251

252

253

254

255

256

257

258

259

260

261

262

263

264

265

266

267

268

269

270

271

272

273

274

275

276

277

278

279

280

281

282

283

284

285

286

287

288

289

290

291

292

293

294

295

296

297

298

299

300

301

302

303

304

305

306

307

308

309

310

311

312

313

314

315

316

317

318

319

320

321

322

323

324

325

326

327

328

329

330

331

332

333

334

335

336

337

338

339

340

341

342

343

344

345

346

347

348

349

350

351

352

353

354

355

356

357

358

359

360

361

362

363

364

365

366

367

368

369

370

371

372

373

374

375

376

377

378

379

380

381

382

383

384

385

386

387

388

389

390

391

392

393

394

395

396

397

398

399

400

401

402

403

404

405

406

407

408

409

410

411

412

413

414

415

416

417

418

419

420

421

422

423

424

425

426

427

428

429

430

431

432

433

434

435

436

437

438

439

440

441

442

443

444

445

446

447

448

449

450

451

452

453

454

455

456

457

458

459

460

461

462

463

464

465</

The diagram illustrates the layout of the HARTMANN ELEKTRONIK 3HE RD 4Slot 32Bit+ expansion card. The card is shown in a perspective view, divided into four vertical slots. Each slot has a different connector type: X1, 4_P2, 3_P2, 2_P2, and 1_P2. The card is labeled 'HARTMANN ELEKTRONIK' and 'CPCI 3HE RD 4Slot 32Bit+'. The card is shown in a perspective view with a grid of pins and a central connector area.

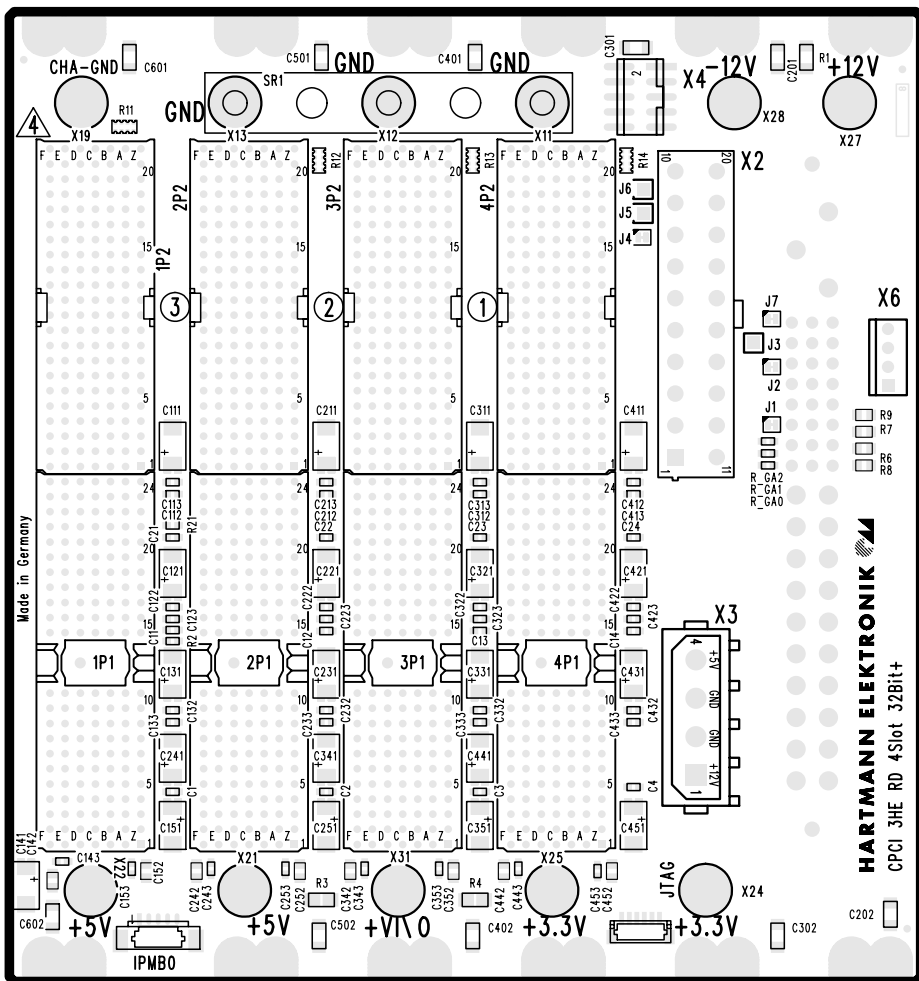
↑

Silkscreen Top
Pads Top

1	2	3

BOTTOM VIEW

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)



Shrouds 1P1- 4P1
on request

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

Busbar for +5V keying

Busbar for +3.3V keying

Silkscreen Bottom
Pads Bottom

BU2844 Rev.BA
CPCI 3HE RD 4Slot 32Bit+
Hartmann Elektronik

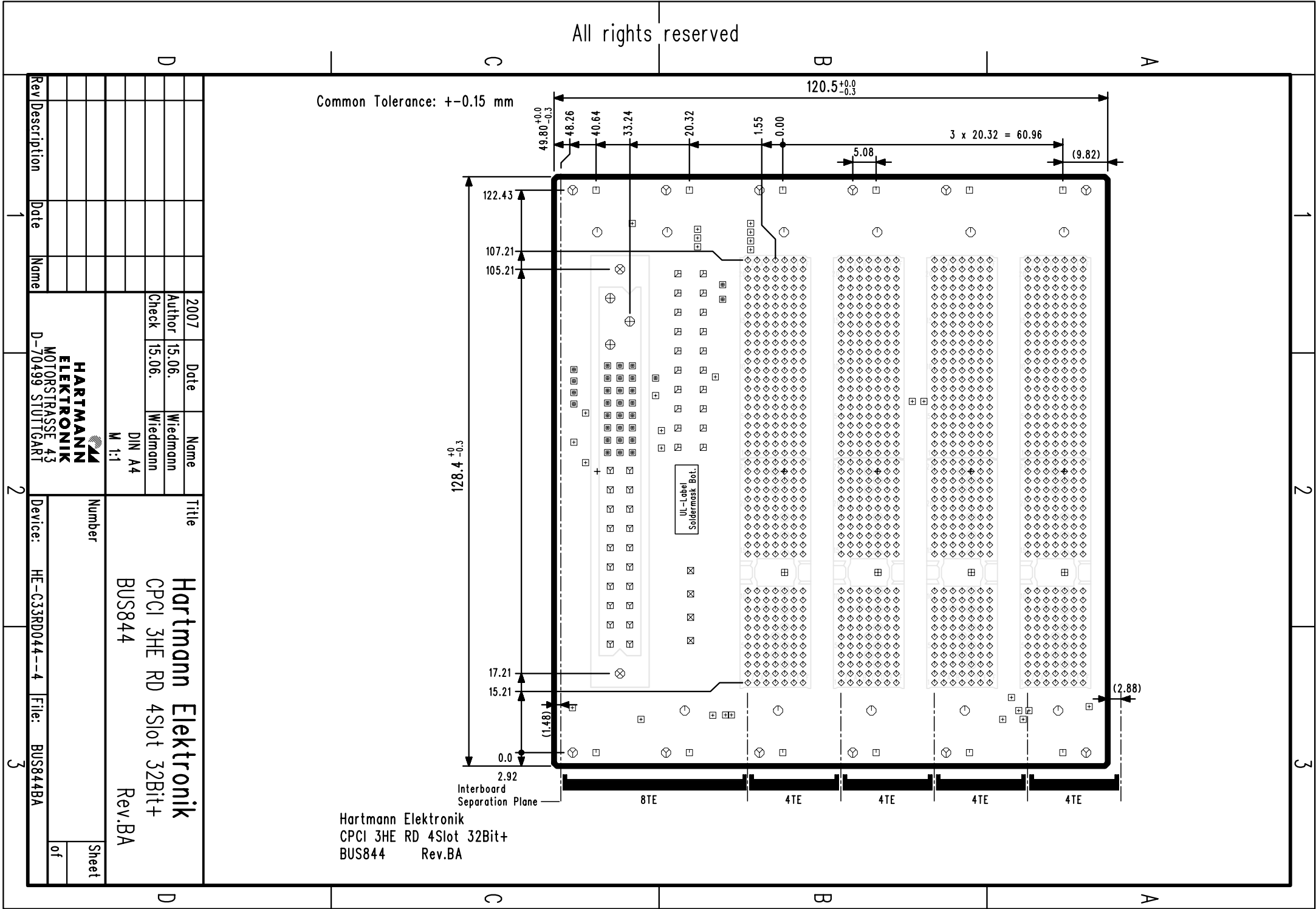
[illegible]

All rights reserved

The drawing is a technical representation of a printed circuit board (PCB) layout. It features a central rectangular area representing the board, surrounded by a border. The board is populated with various components, including a large central component labeled 'UL-Label Soldermask Bot.' and several smaller components. Dimensions are provided for the board size and component placement. The title block at the bottom contains the following information:

Rev	Description	Date	Name	2007	Date	Name	Title
				Author	15.06.	Wiedmann	Hartmann Elektronik CPCI 3HE RD 4Slot 32Bit+ BUS844 Rev.BA
				Check	15.06.	Wiedmann	

Additional information in the title block includes: HARTMANN ELEKTRONIK, MOTORSTRASSE 43, D-70499 STUTTGART, DIN A4, M 1:1, Number, Device: HE-C33RD044--4, File: BUS844BA, Sheet of, and a common tolerance of ± 0.15 mm.



All rights reserved

Common Tolerance: ± 0.15 mm

Dimensions (mm):

- Overall Width: $120.5^{+0.0}_{-0.3}$
- Overall Height: $128.4^{+0.3}_{-0.3}$
- Top Margin: $49.80^{+0.0}_{-0.3}$
- Top Margin: 48.26
- Top Margin: 40.64
- Top Margin: 33.24
- Top Margin: 20.32
- Top Margin: 1.55
- Top Margin: 0.00
- Top Margin: 5.08
- Top Margin: $3 \times 20.32 = 60.96$
- Top Margin: (9.82)
- Left Margin: 122.43
- Left Margin: 107.21
- Left Margin: 105.21
- Right Margin: 17.21
- Right Margin: 15.21
- Right Margin: (1.48)
- Right Margin: 0.0
- Right Margin: 2.92
- Right Margin: (2.88)

Interboard Separation Plane

8TE, 4TE, 4TE, 4TE, 4TE

Rev	Description	Date	Name	2007	Date	Name	Title
				Author	15.06.	Wiedmann	Hartmann Elektronik
				Check	15.06.	Wiedmann	CPCI 3HE RD 4Slot 32Bit+
						DIN A4	BUS844
						M 1:1	Rev.BA

Hartmann Elektronik
CPCI 3HE RD 4Slot 32Bit+
BUS844 Rev.BA

All rights reserved

Common Tolerance: ± 0.15 mm

Dimensions (mm):

- Overall Width: $120.5^{+0.0}_{-0.3}$
- Overall Height: $128.4^{+0.3}_{-0.3}$
- Top Margin: $49.80^{+0.0}_{-0.3}$
- Top Margin: 48.26
- Top Margin: 40.64
- Top Margin: 33.24
- Top Margin: 20.32
- Top Margin: 1.55
- Top Margin: 0.00
- Top Margin: 5.08
- Top Margin: $3 \times 20.32 = 60.96$
- Top Margin: (9.82)
- Left Margin: 122.43
- Left Margin: 107.21
- Left Margin: 105.21
- Right Margin: 17.21
- Right Margin: 15.21
- Right Margin: 0.0
- Right Margin: 2.92
- Right Margin: (1.48)
- Right Margin: (2.88)

Interboard Separation Plane

8TE, 4TE, 4TE, 4TE, 4TE

Rev	Description	Date	Name	2007	Date	Name	Title
				Author	15.06.	Wiedmann	Hartmann Elektronik
				Check	15.06.	Wiedmann	CPCI 3HE RD 4Slot 32Bit+
						DIN A4	BUS844
						M 1:1	Rev.BA

Hartmann Elektronik
CPCI 3HE RD 4Slot 32Bit+
BUS844 Rev.BA

↑

Silkscreen Top
Pads Top

All rights reserved

Common Tolerance: ± 0.15 mm

Dimensions: $140.8^{+0.0}_{-0.3}$, $128.4^{+0.3}_{-0.3}$, $49.80^{+0.0}_{-0.3}$, 48.26 , 40.64 , 33.24 , 20.32 , 1.55 , 0.00 , 5.08 , $6 \times 20.32 = 121.92$, (9.82) , 122.43 , 107.21 , 105.21 , 17.21 , 15.21 , 0.0 , 2.92 , (48.1) , (2.88)

UL-Label
Soldermask Bot.

8TE, 4TE, 4TE, 4TE, 4TE, 4TE

Interboard Separation Plane

Hartmann Elektronik
CPCI 3HE RD 5Slot 32Bit+
BUS843 Rev.BA

Rev	Description	Date	Name	2003	Date	Name	Title
1				Author	04.11.	Wiedmann	Hartmann Elektronik CPCI 3HE RD 5Slot 32Bit+ BUS843 Rev.BA
				Check	04.11.	Wiedmann	
						DIN A4	
						M 1:1	
							Number
							Device: HE-C33RD054--4
							File: BUS843BA
							Sheet
							of

All rights reserved

Common Tolerance: ± 0.15 mm

Dimensions: $140.8^{+0.0}_{-0.3}$, $128.4^{+0.0}_{-0.3}$, $6 \times 20.32 = 121.92$, (9.82) , (2.88) , 5.08 , 1.55 , 0.00 , 20.32 , 33.24 , 40.64 , 48.26 , $49.80^{+0.0}_{-0.3}$, 122.43 , 107.21 , 105.21 , 17.21 , 15.21 , 0.0 , 2.92 .

Labels: UL-Label, Soldermask Bot., 8TE, 4TE, Interboard Separation Plane.

Rev	Description	Date	Name
1			

2003	Date	Name
Author	04.11.	Wiedmann
Check	04.11.	Wiedmann
DIN A4		
M 1:1		

HARTMANN ELEKTRONIK
MOTORSTRASSE 43
D-70499 STUTTGART

Hartmann Elektronik
CPCI 3HE RD 5Slot 32Bit+
BUS843
Rev.BA

Number

Device: HE-C33RD054--4 File: BUS843BA

Sheet of

[illegible]

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

Silkscreen Top
Pads Top

Hartmann Elektronik
CPCI 3HE RD 6Slot 32Bit+
BUS840 Rev.BA

HARTMANN ELEKTRONIK

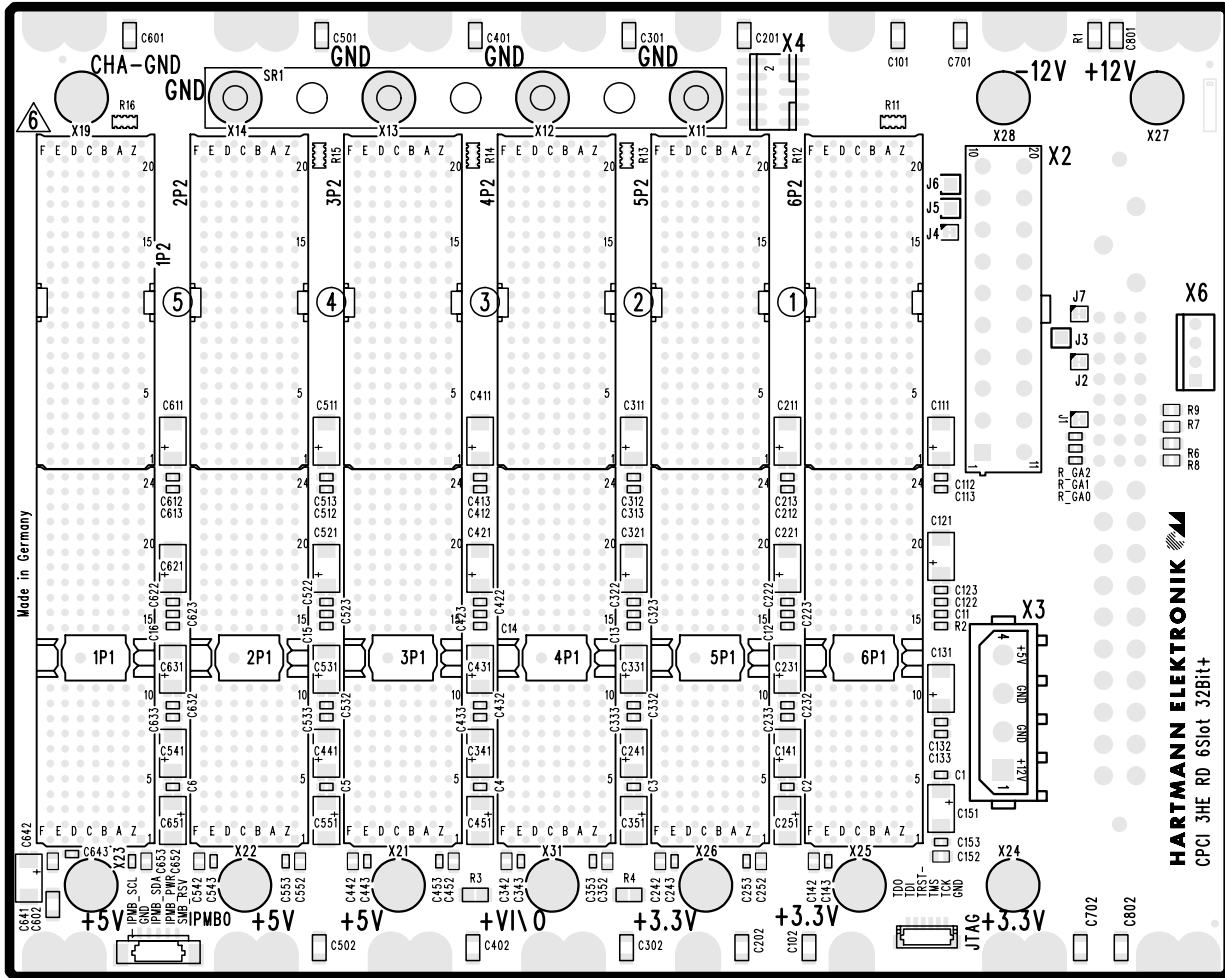
Made in Germany

CPCI 3HE RD 6Slot 32Bit+

Hartmann Elektronik
CPCI 3HE RD 6Slot 32Bit+
BUS840 Rev.BA

[illegible]

BOTTOM VIEW



Shrouds 1P1- 6P1
on request

Busbar for +5V keying

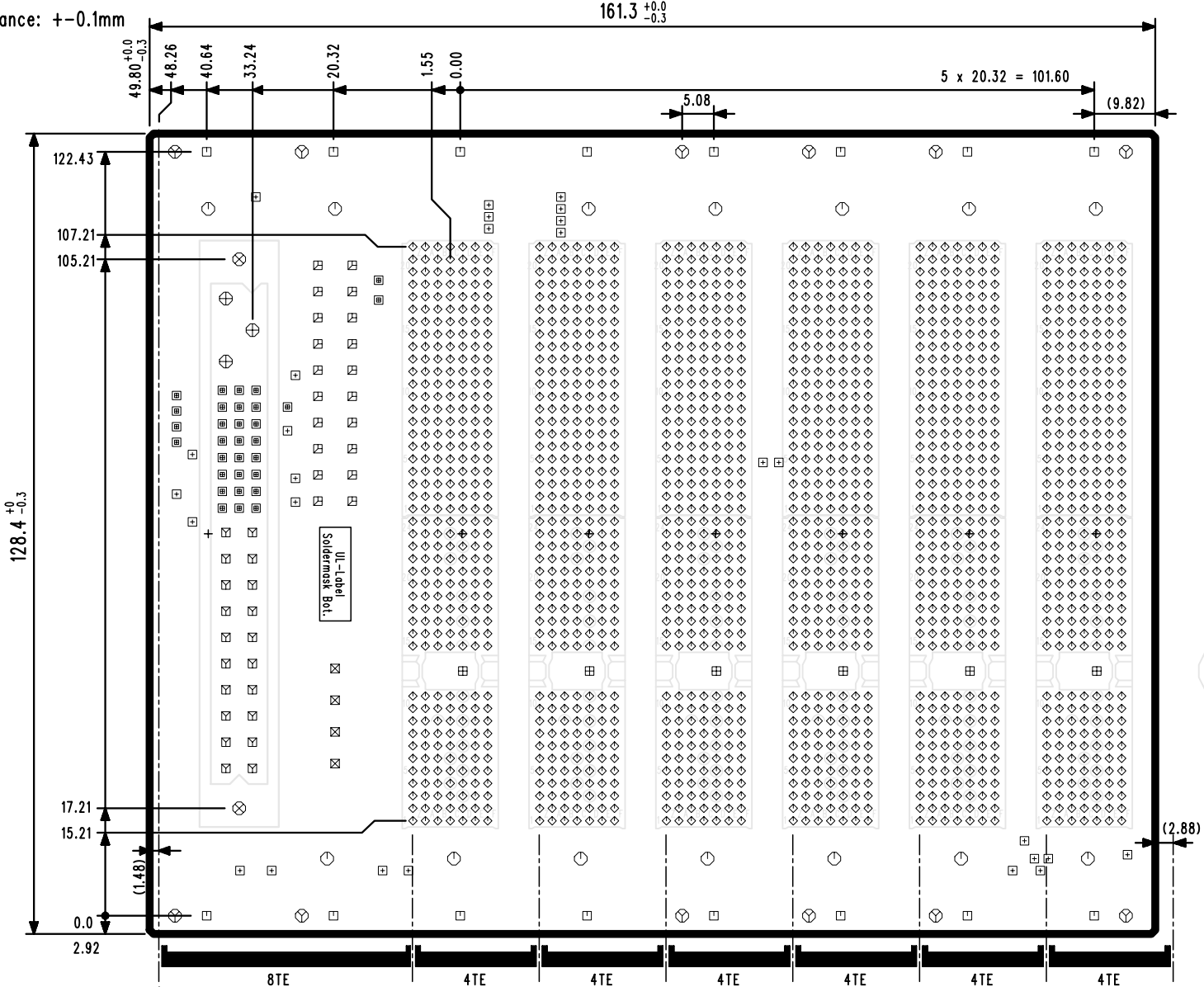
Busbar for +3.3V keying

Silkscreen Bottom
Pads Bottom

BU2840 Rev.BA
CPCI 3HE RD Slot 32Bit+
Hartmann Elektronik

[illegible]

Common Tolerance: $\pm 0.1\text{mm}$



Hartmann Elektronik
CPCI 3HE RD 6Slot 32Bit+
BUS840 Rev.BA

Interboard
Separation Plane

Rev Description		Date	Name	2003	Date	Name	Title	Number	Sheet
				Author	26.03.	Hamann	Hartmann Elektronik CPCI 3HE RD 6Slot 32Bit+ BUS840 Rev.BA	M 1:1	1
				Check	26.03.	Wiedmann			
							Hartmann Elektronik MOTORSTRASSE 43 D-70499 STUTTGART	M 1:1	2
							HF-C33RD065--4	File: BUS840BA	3

Figure 1 illustrates the dimensions and pin configurations of the 3HE RD 7Slot 32Bit+ card. The figure includes a side view of the card (X1) and seven top views of the slots, labeled 1 through 7. Each slot view shows a grid of pins with labels Z, A, B, C, D, E, F for columns and 1 through 24 for rows. The card is manufactured by Hartmann Elektronik and is made in Germany.

▲

D

Common Tolerance: ± 0.15 mm

[illegible]

201.8^{+0.0}_{-0.3}

49.80^{+0.0}_{-0.3} 48.26 40.64 33.24 20.32 1.55 0.00 5.08 7 x 20.32 = 142.24 (9.82)

122.43 107.21 105.21 17.21 15.21 0.0 2.92

8TE 4TE 4TE 4TE 4TE 4TE 4TE 4TE 4TE

Interboard Separation Plane

Hartmann Elektronik
CPCI 3HE RD 8Slot 32Bit+
BUS841 Rev.BA

Common Tolerance: ± 0.15 mm

[illegible]