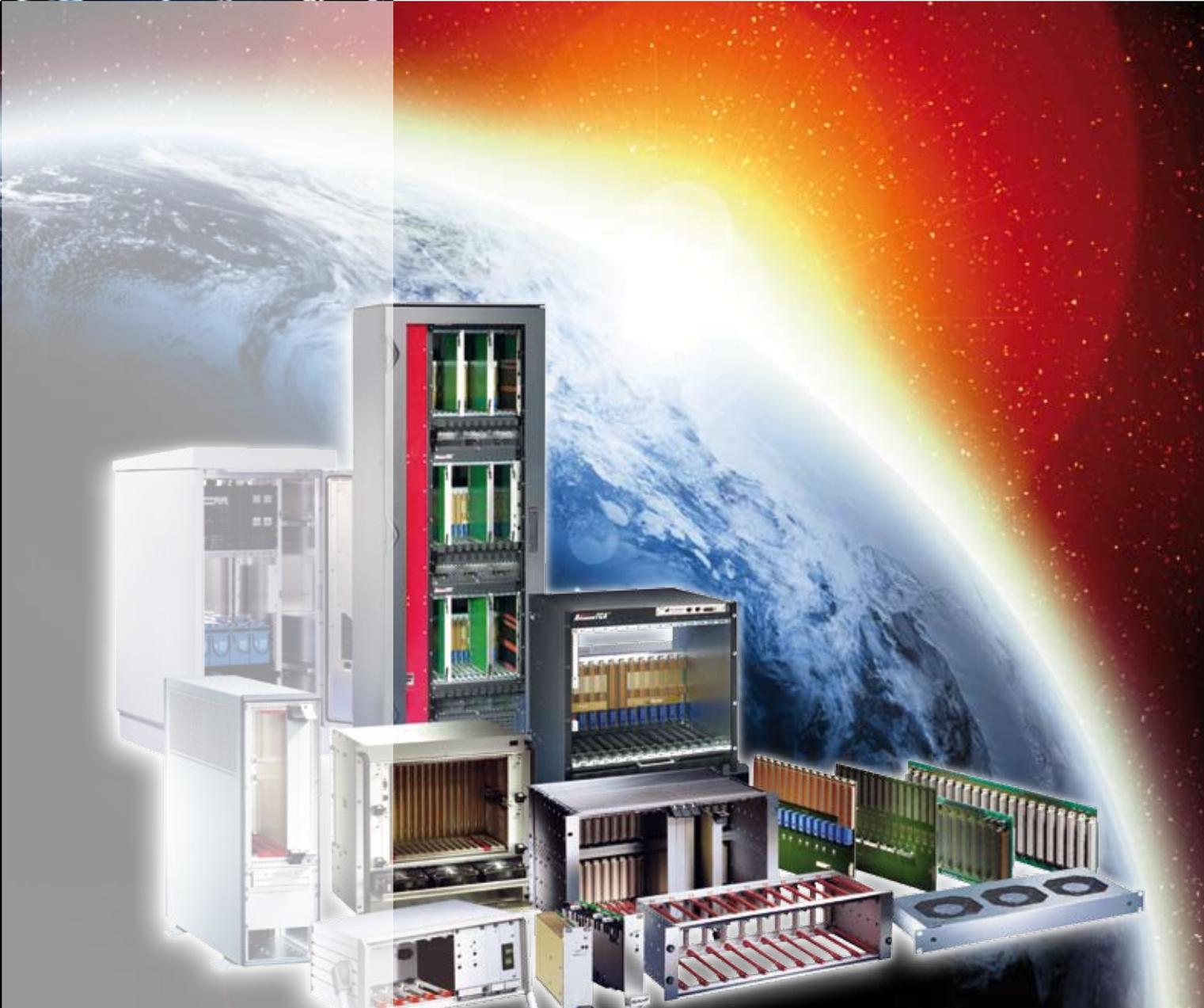


Main Catalogue

Edition 23

10. Backplanes



Backplanes

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Accessories for cabinets and wall mounted cases 3

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Subracks/
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Front panels,
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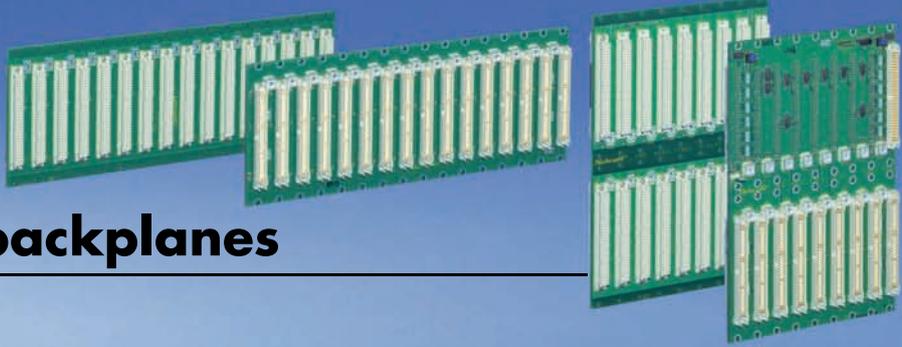
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Power supply
units 9

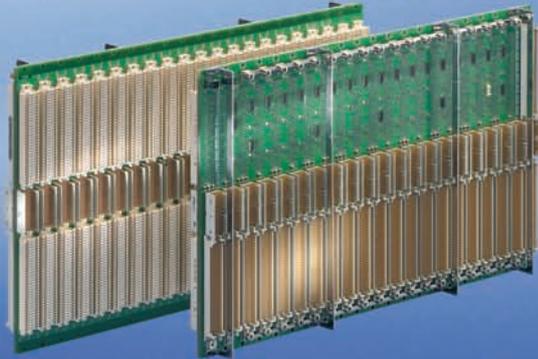
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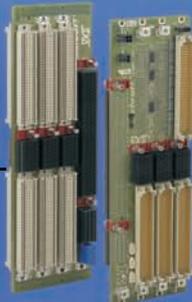
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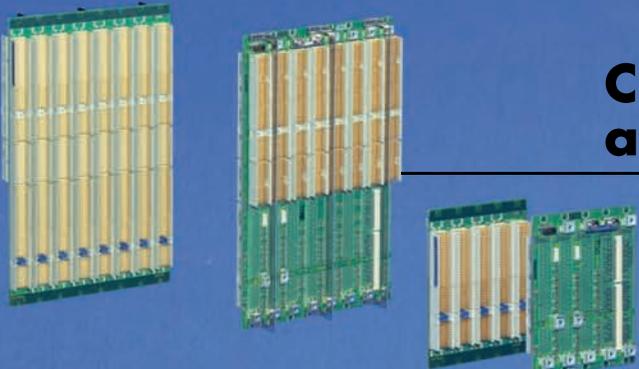
VME backplanes



VME64x backplanes

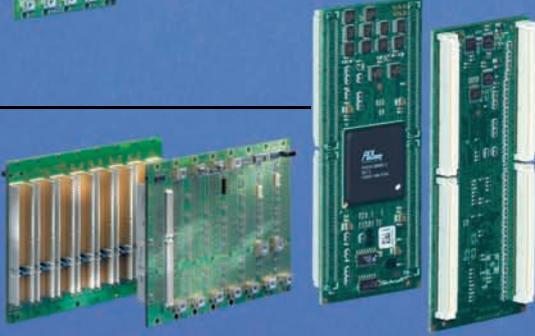


VXS backplanes



CPCI backplanes and bridges

PXI backplanes



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Backplanes

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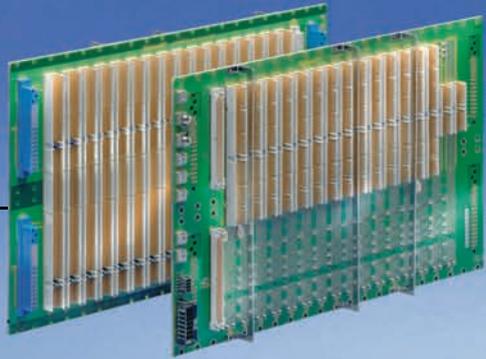
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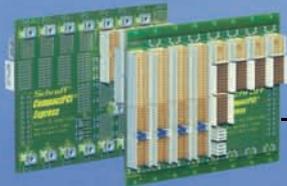
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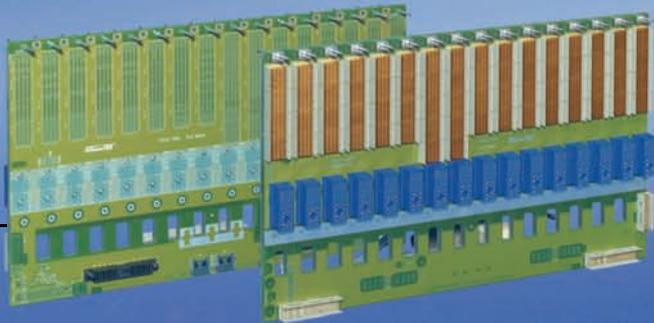
PSB and H.110 backplanes



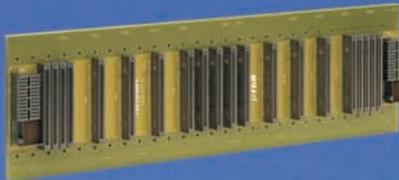
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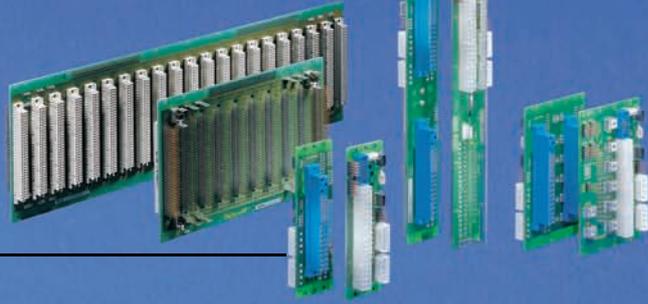
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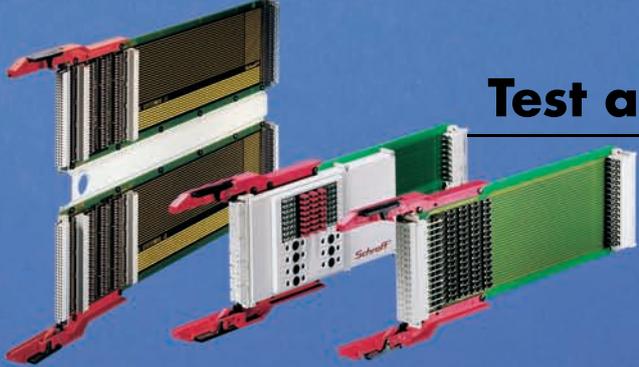
MicroTCA backplanes



Power and universal backplanes



Test adaptors

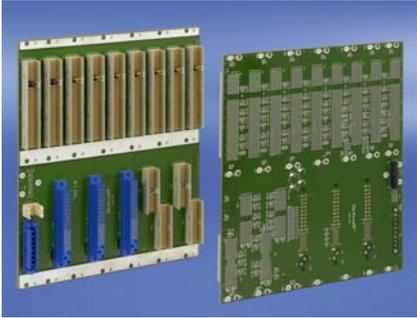


36106010 (12402005 12606003 12406003 12606005 12096003 11902001 11192004 11100013 11100010)



Backplanes

Our competence in overview



Custom backplane



Project management



Development



Layout



Test laboratory

Comprehensive standard backplane programme

ATCA - MicroTCA - CompactPCI - VME - Schroff offers you an extensive programme of standard backplanes already optimised to your requirements. Should you still not find your backplane in our range, we can develop or modify to create your tailor-made backplane, quickly and on attractive terms.

All our developing and manufacturing is done in-house and competent personnel are available at any time to deal with technical questions, quotes and project support.

Custom development to customer requirements

From minor modifications to our standard backplanes through to specific form factors and connection topologies, Schroff has the right solution for you.

One contact partner as customer interface

Competent personnel are available at any time for technical questions, quotes, project support and after-sales care. If you wish, we are also happy to help you generate the specification for your custom backplane. Contact at an early stage between our technical staff and our customers helps us to develop cost-optimised projects that meet all our customers' requirements.

Many years of experience

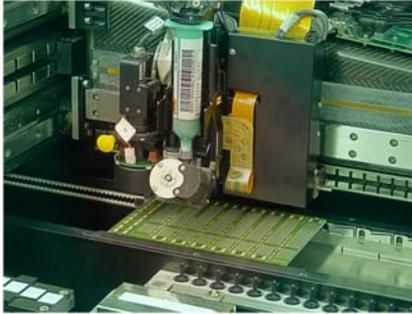
40 years of experience, continual fundamental research and innovation in the backplane sector; active participation in standards committees and in the specification of new system architectures and high-speed transmission technologies.

Modern design tools

Modern simulation tools and measurement equipment plus in-house developed high-performance test adaptors. Development of new technologies and topologies using high-speed measurements performed in-house.

Backplanes

Our competence in overview



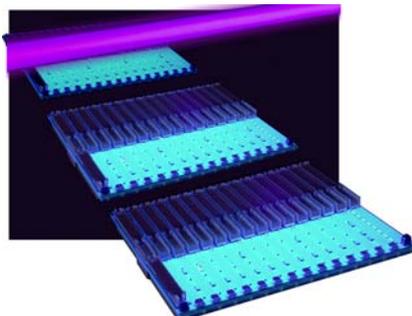
Solder paste printing



Automatic optical inspection (AOI)



Connector mounting



Conformal coating



Electrical final test

Modern machine facilities in Straubenhardt

Solder paste printing is one of the quality-defining process steps in backplane manufacture. This solder-paste printer, based on innovative inkjet technology, allows fast, flexible and highly dependable solder paste printing. Since the process dispenses with the 'stencils' required by other methods, the printing program can be changed in a very short time. This means that small batches can also be printed cost-effectively.

Our modern **SMD placement machines** support a wide spectrum of components with a high placement performance. Small and large production runs can be implemented flexibly and time-efficiently.

Vapour-phase soldering, also known as vapour-phase reflow, is currently the most universal and most reliable soldering process. It is ideally suited to all types of SMD component and carrier material. The homogenous temperature distribution of the carrier medium allows the widest variety of sub-assemblies, from Flexprints to multilayer boards, to be soldered reliably without danger of overheating.

There is also the option of processing conventional components with our **wave-soldering system**.

Automatic optical inspection (AOI) is an optical test procedure for constructed sub-assemblies. Highly-developed image processing systems reliably detect faulty soldered joints and wrongly placed or missing components.

Connectors are pressed into the backplane fully automatically. The **press-in technique** allows quick and economic mounting of the connector without subjecting the PCB to thermal stress. The press-in action creates a gas-tight, dependably electrically conductive and mechanically strong connection. Intelligent force/displacement measuring during the press-in action ensures consistent high quality.

Backplanes that are subject to particular climatic stresses can be coated with a **protective lacquer (conformal coating)**. This coating protects the backplane from e.g. corrosion and mould. The fluorescent characteristic of the protective coating enables the coating to be checked for completeness or damage under UV light.

No backplane leaves our production facility without **100% testing**. All backplanes are subjected to extensive electrical testing before despatch. An automatic process checks the entire backplane for continuity and short circuits. This testing also covers passive and simple active components such as resistors, capacitors and diodes and the description and testing of I2C EEPROMS or bus terminations. For this Schroff has a comprehensive automated and semi-automated testing facility.

Backplanes – VMEbus

Monolithic J1/J2 backplanes (6 U)

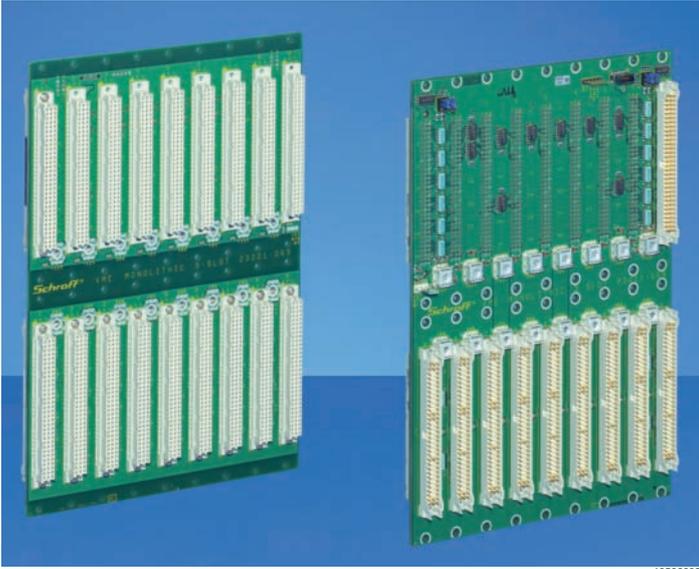


Illustration shows 23001-069

10506003

- Conforms to ANSI/VITA 1-1994 VME64 standard
- Monolithic backplane, 6 U with J1 and J2 plane
- Termination switchable (active/passive) via jumper; passive termination factory-preset (see illustration)
- Electronic automatic daisy chain (EDC)
- Automatic daisy chain (ADC) and manual daisy chain (MDC) available as assembly option available on request
- Outstanding high-frequency noise suppression and very high MTBF values due to ceramic capacitors
- Connection or isolation between the digital GND and chassis GND can be effected via the screw fittings (see illustration)
- Supply voltages can be applied via powerbugs (ring tag M4) or FASTON
- Two utility connectors for status signals, two different configurations (see illustration)



Delivery comprises

Item	Qty	Description
1	1	VME monolithic J1/J2 backplane
2	1	Kit screws M4 6, with lock washer, for power connection

Order Information

Number of slots	Width mm	Height U	Utility connector 2 U	Part no.
3	59.5	6	MicroMatch	23001-063
4	79.8	6	MicroMatch	23001-064
5	100.2	6	MicroMatch	23001-065
6	120.5	6	MicroMatch	23001-066
7	140.8	6	MicroMatch	23001-067
8	161.1	6	MicroMatch	23001-068
9	181.4	6	SMCQ	23001-069
10	201.8	6	MicroMatch	23001-070
12	242.4	6	MicroMatch	-*
15	303.4	6	MicroMatch	23001-075
16	321.3	6	SMCQ	-*
18	364.3	6	MicroMatch	23001-078
20	405.0	6	SMCQ	23001-080
21	425.3	6	MicroMatch	23001-081

Utility cable MicroMatch with single conductors, length 600 mm, 1 piece **23204-812**

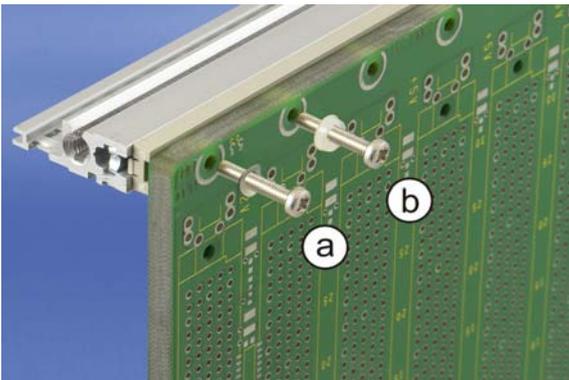
Utility cable MicroMatch with flat ribbon cable, length 600 mm, 1 piece **23204-811**

Utility cable SMCQ with flat ribbon cable, length 350 mm, 2 x 12-pin female connector, 1 piece **23204-115**

Utility cable SMCQ with flat ribbon cable, length 600 mm, 2 x 12-pin female connector, 1 piece **23204-116**

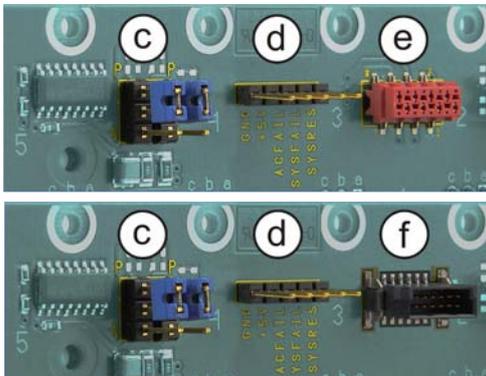
Note

- Other configurations available on request or via www.schroff.co.uk/configuration
- Types marked with an asterisk * are available on request
- Screws, washers for backplane fitting see page 10.30



Backplane mounting: a: conductive, b: isolated

10508004



- c: termination switch-over active/passive,
- d: utility connector 1,
- e: utility connector 2 MicroMatch,
- f: utility connector 2 SMCQ

10509001



ServicePLUS see page 10.31

Backplanes – VMEbus

J1 backplanes (3 U)

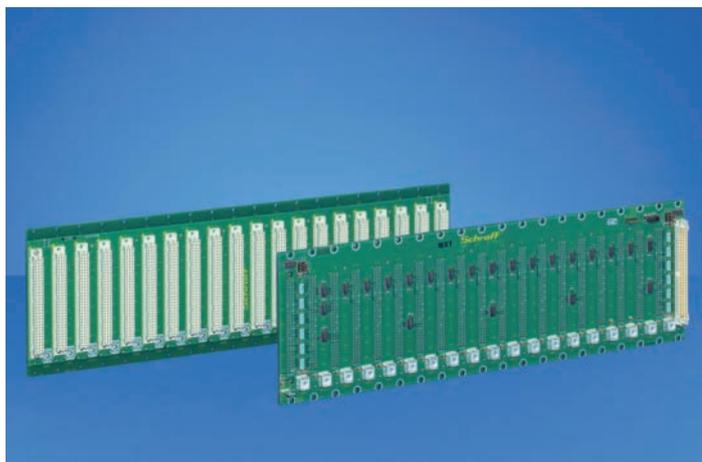


Illustration shows 23001-020

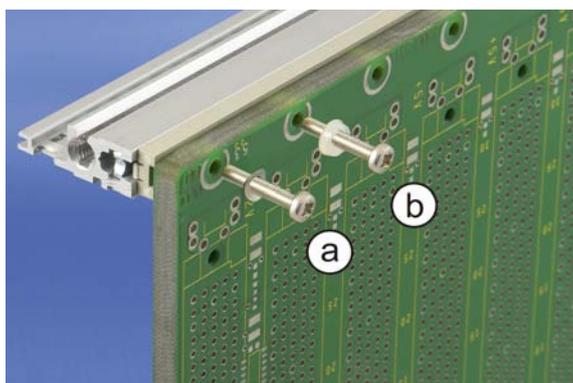
10506001



- Conforms to ANSI/VITA 1-1994 VME64 standard
- 3 U with J1 plane
- Termination switchable (active/passive) via jumper; passive termination factory-preset (see illustration)
- Electronic automatic daisy chain (EDC)
- Automatic daisy chain (ADC) and manual daisy chain (MDC) available as assembly option available on request
- Outstanding high-frequency noise suppression and very high MTBF values due to ceramic capacitors
- Connection or isolation between the digital GND and chassis GND can be effected via the screw fittings (see illustration)
- Supply voltages can be applied via powerbugs (ring tag M4) or FASTON
- Two utility connectors for status signals, two different configurations (see illustration)

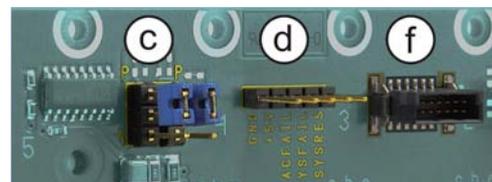
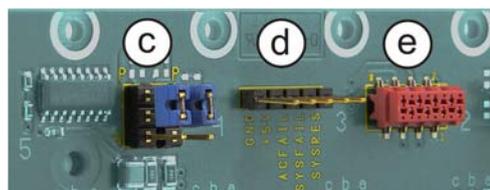
Delivery comprises

Item	Qty	Description
1	1	VME J1 backplane
2	1	Set of 6 M4 bolts, with disc spring washer; for power connection



Backplane mounting: a: conductive, b: isolated

10508004



10509001

c: termination switch-over active/passive,
d: utility connector 1,
e: utility connector 2 MicroMatch,
f: utility connector 2 SMCQ



ServicePLUS see page 10.31

Order Information

Number of slots	Width mm	Height U	Utility connector 2 U	Part no.
1	20.2	3	-	23001-001
2	39.1	3	MicroMatch	23001-002
3	59.7	3	MicroMatch	23001-003
4	79.8	3	MicroMatch	23001-004
5	100.2	3	MicroMatch	23001-005
6	120.5	3	MicroMatch	23001-006
7	140.8	3	SMCQ	23001-007
8	161.1	3	MicroMatch	-*
9	181.4	3	MicroMatch	23001-009
10	199.2	3	SMCQ	23001-010
11	219.5	3	MicroMatch	-*
12	242.4	3	SMCQ	-*
13	260.2	3	MicroMatch	23001-013
15	303.4	3	MicroMatch	23001-015
17	341.4	3	MicroMatch	23001-017
18	364.3	3	MicroMatch	23001-018
20	405.0	3	MicroMatch	23001-020
21	425.3	3	MicroMatch	23001-021
Utility cable MicroMatch with single conductors, length 600 mm, 1 piece				23204-812
Utility cable MicroMatch with flat ribbon cable, length 600 mm, 1 piece				23204-811
Utility cable SMCQ with flat ribbon cable, length 350 mm, 2 × 12-pin Female connector, 1 piece				23204-115
Utility cable SMCQ with flat ribbon cable, length 600 mm, 2 × 12-pin Female connector, 1 piece				23204-116

- Types marked with an asterisk * are available on request
- Screws, washers for backplane fitting see page 10.30

Backplanes – VMEbus

J2 backplanes (3 U)

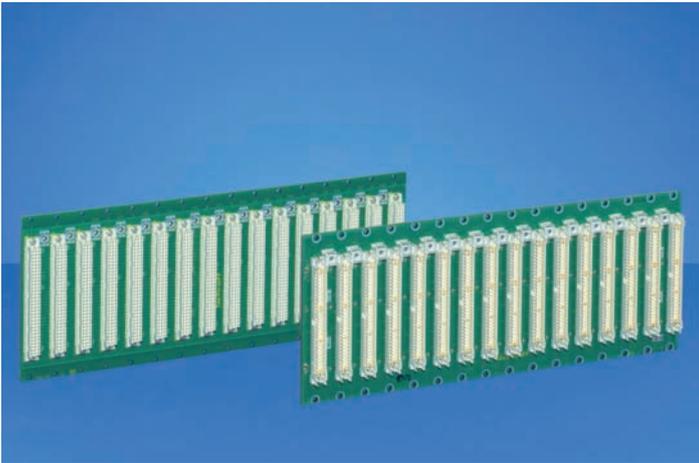


Illustration shows 23001-046

10506002



- Conforms to ANSI/VITA 1-1994 VME64 standard
- 3 U with J2 plane
- Termination passive
- Outstanding high-frequency noise suppression and very high MTBF values due to ceramic capacitors
- Multiple backplanes can be placed side by side without loss of slot space
- Connection or isolation between the digital GND and chassis GND can be effected via the screw fittings (see illustration)
- Supply voltages can be provided via powerbugs (ring tag M4) or FASTONs (see illustration)

Delivery comprises

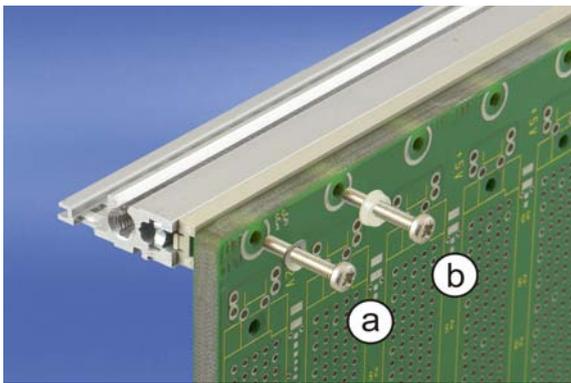
Item	Qty	Description
1	1	VME J2 backplane
2	1	Set of 6 M4 bolts, with disc spring washer; for power connection

Order Information

Number of slots	Width mm	Height U	Part no.
2	40.4	3	23001-032
3	59.7	3	23001-033
4	79.8	3	23001-034
5	100.2	3	-*
6	120.5	3	-*
7	140.8	3	23001-037
10	199.2	3	23001-040
16	321.3	3	23001-046
20	405.0	3	-*
21	425.3	3	23001-051

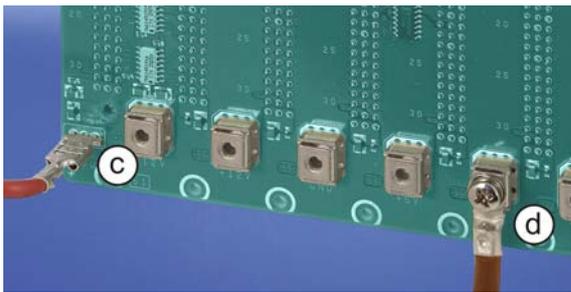
Note

- Types marked with an asterisk * are available on request
- Screws, washers for backplane fitting see page 10.30



Backplane mounting: a: conductive, b: isolated

10508004



Supply voltage feed:

- c: Cable with blade receptacle fixed to FASTON:
- d: Cable with ring tag bolted to powerbug, with M4 screw and lock washer

10508006



For further information www.schroff.biz/oneclick
oneClick search code = Part no.



ServicePLUS see page 10.31

Backplanes – VME64 extension

Monolithic VME64x backplanes (6 U)

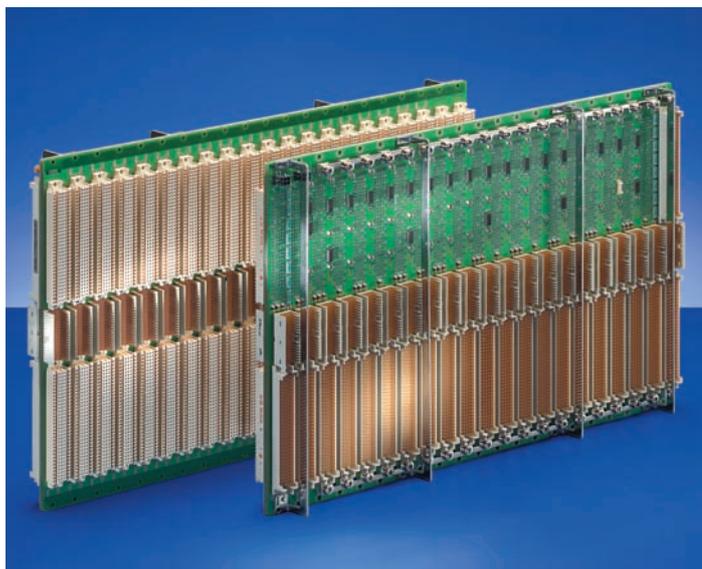
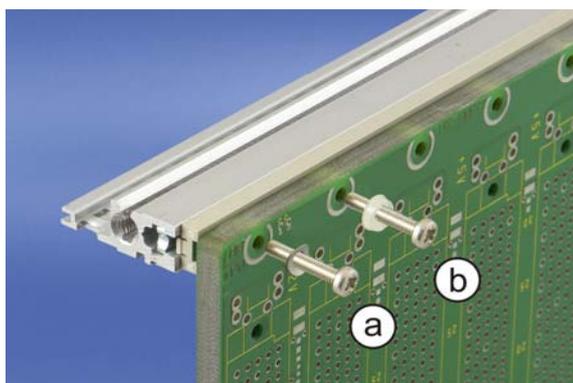


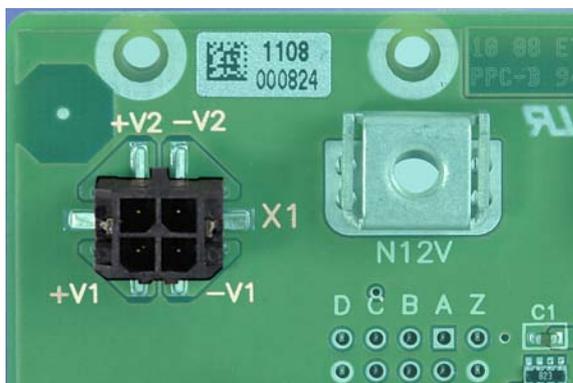
Illustration shows 23001-551

10502001



Backplane mounting: a: conductive, b: isolated

10508004



Connector for additional voltages V1/V2

10508007



ServicePLUS see page 10.31

- Conforms to:
 - ANSI/VITA 1-1994 VME64 Standard
 - ANSI/VITA 1.1-1997 VME64 Extension Standard
 - ANSI/VITA 1.5-2003 VME2eSST Specification
 - ANSI/VITA 1.7-2003 Increased Current Level
 - ANSI/VITA 38 System Management on VME
- Monolithic backplane, 6 U with J1 and J2 plane
- Termination passive
- Electronic automatic daisy chain (EDC)
- Outstanding high-frequency noise suppression and very high MTBF values due to ceramic capacitors
- Connection or isolation between the digital GND and chassis GND can be effected via the screw fittings (see illustration)
- Supply voltages can be applied via powerbugs (ring tag M4) or FASTON
- Utility connector for status signals
- System management bus (SMB) connector conforms to VITA38
- Connector for additional voltages V1/V2 (see illustration)

Delivery comprises

Item	Qty	Description
1	1	VME64x backplane
2	1	Kit screws M4 × 6, with lock washer; for power connection

Order Information

Number of slots	Width mm	Height U	Without P0	With P0
			Part no.	Part no.
2	39.1	6	23001-502	23001-532
3	59.5	6	23001-503	23001-533
4	79.8	6	23001-504	23001-534
5	100.2	6	23001-505	23001-535
6	120.5	6	23001-506	23001-536
7	140.8	6	23001-507	23001-537
8	161.1	6	23001-508	23001-538
9	181.4	6	23001-509	23001-539
10	201.8	6	23001-510	23001-540
11	222.0	6	23001-511	23001-541
12	242.4	6	23001-512	23001-542
15	303.4	6	23001-515	23001-545
16	323.7	6	23001-516	23001-546
20	405.0	6	23001-520	23001-550
21	425.3	6	23001-521	23001-551
21	425.3	7	-*	-*

SM bus/IPMI cable 4 individual wires with SMB plug to open end, length 750 mm, 1 piece **23204-113**

Utility cable SMCQ with flat ribbon cable, length 350 mm, 2 × 12-pin Female connector, 1 piece **23204-115**

Utility cable SMCQ with flat ribbon cable, length 600 mm, 2 × 12-pin Female connector, 1 piece **23204-116**

Note

- Types marked with an asterisk * are available on request
- Screws, washers for backplane fitting see page 10.30

Backplanes – VMEbus

VXS backplanes

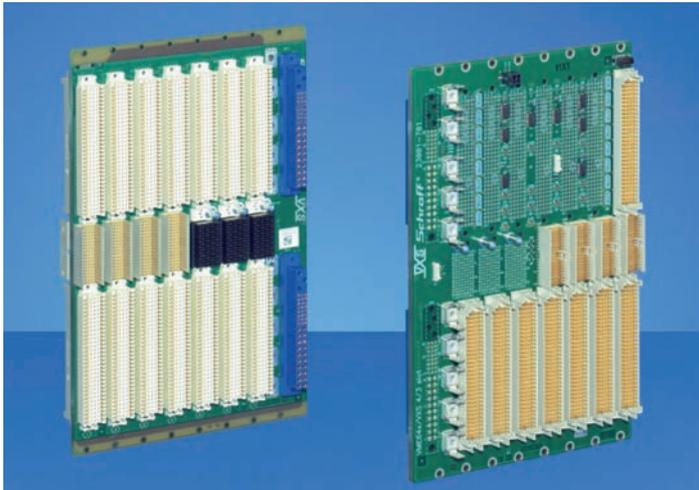


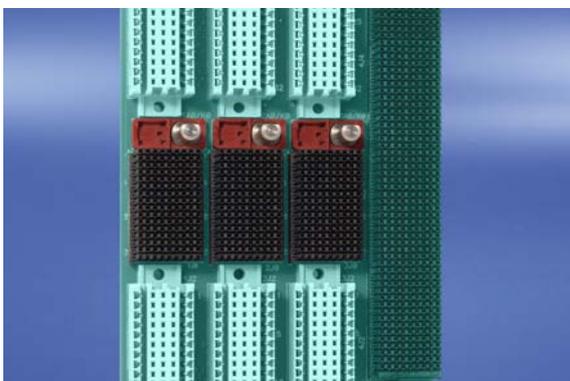
Illustration shows 23001-701

10506004



Illustration shows 23001-704

10508002



High-speed connector with keying and alignment pin

10508009



ServicePLUS see page 10.31

- Conforms to
 - ANSI/VITA 41 VXS VMEbus Switched Serial Standard
 - ANSI/VITA 1-1994 VME64 Standard
 - ANSI/VITA 1.1-1997 VME64 Extension Standard
 - ANSI/VITA 1.5-2003 VME2eSST Specification
 - ANSI/VITA 1.7-2003 Increased Current Level
 - ANSI/VITA 38 System Management on VME
- Parallel VMEbus on J1 and J2, serial data connections on P0
- MultiGig RT2 connector on P0 position for data transfer rates up to 10 Gbps per differential pair
- Dual star, star and ring topologies
- Keying and alignment pins to avoid mechanical and electrical damage
- Outstanding high-frequency noise suppression and very high MTBF values due to ceramic capacitors
- Supply voltages can be applied via powerbugs (ring tag M4), FASTONs or P47 connectors
- Utility connector for status signals
- System management bus (SMB) connector conforms to VITA38
- Connector for additional voltages V1/V2

Delivery comprises

Item	Qty	Description
1	1	VXS backplane
2	1	Set of M4x6 bolts, with disc spring washer; for power connection

Order Information

Number of slots	Width mm	Height U	Description	Part no.
4	80.3	6	1 VXS switch slot and 3 VXS payload slots	23001-704
7	151.4	6	4 VME64x slots, 3 VXS payload slots, ring-connected, 1 slot for 2 x 3 U power supply units	23001-701
12	242.0	6	2 VXS switch slots and 10 VXS payload slots	23001-712
20	405.4	6	2 VXS switch slots and 18 VXS payload slots	23001-720
SM bus/IPMI cable 4 individual wires with SMB plug to open end, length 750 mm, 1 piece				23204-113
Utility cable SMCQ with flat ribbon cable, length 350 mm, 2 x 12-pin female connector, 1 piece				23204-115
Utility cable SMCQ with flat ribbon cable, length 600 mm, 2 x 12-pin female connector, 1 piece				23204-116
Keying and alignment pin for VXS Payload slot with RTM, PU 10 pieces				20817-900
Keying and alignment pin for VXS Payload slot without RTM, PU 10 pieces				20817-969
Keying and alignment pin for VXS Switch slots, PU 10 pieces				20817-970

Note

- Screws, washers for backplane fitting see page 10.30

Backplanes – CompactPCI

CompactPCI backplane with system slot on the right

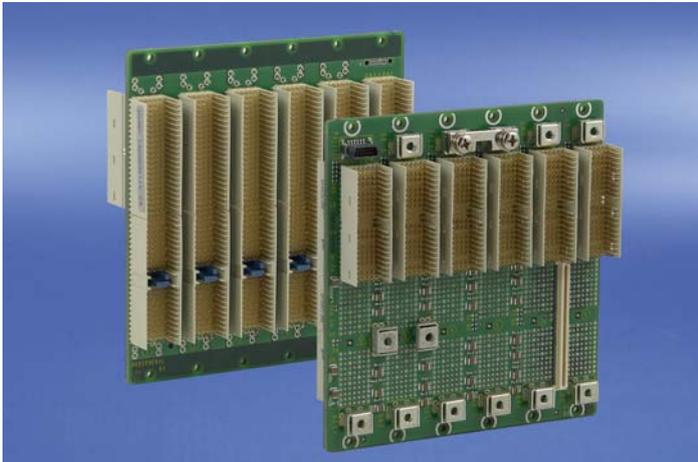
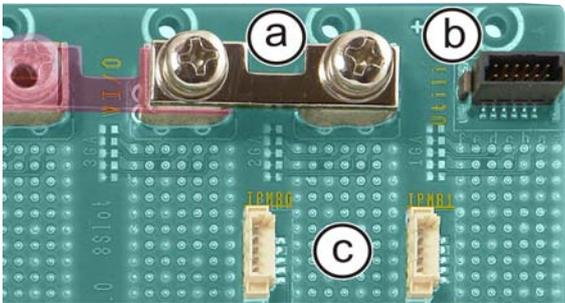


Illustration shows 23006-816

12408001



12408002

a: V(I/O) bridge b: utility-connector
c: IPMB-connector



ServicePLUS see page 10.31

- Conforms to:
 - PICMG 2.0 R3.0 CompactPCI Core Specification
 - PICMG 2.1 R2.0 Hot-swap Specification
 - PICMG 2.9 R1.0 System Management Bus Specification
 - PICMG 2.10 R1.0 Keying Specification
- Versions: 3 U 32-bit and 64-bit, 6 U 64-bit, with system slot to right
- V (I/O) on +3.3 V or +5 V adjustable (see illustration)
- Backplanes with up to 5 slots are capable of 66 MHz, 6 to 8 slot backplanes are set to 33 MHz operation
- Outstanding high-frequency noise suppression and very high MTBF values with ceramic capacitors
- Connection or isolation between the digital GND and chassis GND can be effected via the screw fittings
- Supply voltages supplied via powerbugs (ring tag M4), FASTONS or P47 connectors
- Utility connector for status signals (SMCQ)
- Intelligent platform management bus (IPMI) connector to PICMG 2.9

Delivery comprises

Item	Qty	Description
1	1	CompactPCI backplane
2	1	Set of M4x6 bolts, with disc spring washer; for power connection

Order Information

Number of slots	Width mm	3 U, 32-bit, CompactPCI-Backplane		3 U, 64-bit, CompactPCI backplane		6 U, 64-bit, CompactPCI backplane	
		3.3 V V(I/O) Part no.	5 V V(I/O) Part no.	3.3 V V(I/O) Part no.	5 V V(I/O) Part no.	3.3 V V(I/O) Part no.	5 V V(I/O) Part no.
1	19.3	23006-331	23006-811	23006-331	23006-811	-*	-*
2	39.6	23006-332	23006-812	-*	-*	23006-372	23006-862
3	60.1	23006-303	23006-813	23006-353	23006-833	23006-373	23006-863
4	80.3	23006-334	23006-814	23006-354	23006-834	23006-374	23006-864
5	100.6	23006-301	23006-815	23006-355	23006-835	23006-375	23006-865
6	121.0	23006-336	23006-816	23006-356	23006-836	23006-376	23006-866
7	141.2	23006-337	23006-817	23006-357	23006-837	23006-377	23006-867
8	161.6	23006-300	23006-818	23006-358	23006-838	23006-378	23006-868
Kit to convert V I/O to 3,3 V 8 coding tabs, yellow, coding key, PU 1 kit							21101-658
ATX cable Length 250 mm, 20-pin ATX plug on ring terminal M4, 1 piece							23204-121
Utility cable SMCQ with flat ribbon cable, length 350 mm, 2 × 12-pin Female connector, 1 piece							23204-115
Utility cable SMCQ with flat ribbon cable, length 600 mm, 2 × 12-pin Female connector, 1 piece							23204-116
Termination adaptor, 32-bit bus for 8 slot CompactPCI backplane, 1 piece							23006-930
Termination adaptor, 64-bit bus for 8 slot CompactPCI backplane, 1 piece							23006-931
SM bus/IPMI cable 4 individual wires with SMB plug to open end, length 750 mm, 1 piece							23204-113

- 4 to 7 slot backplanes can be used as primary backplane with bridge
- Types marked with an asterisk * are available on request
- Secondary CompactPCI backplanes and bridges see from page 10.12
- Screws, washers for backplane fitting see page 10.30

Backplanes – CompactPCI

CompactPCI backplanes with system slot on the left

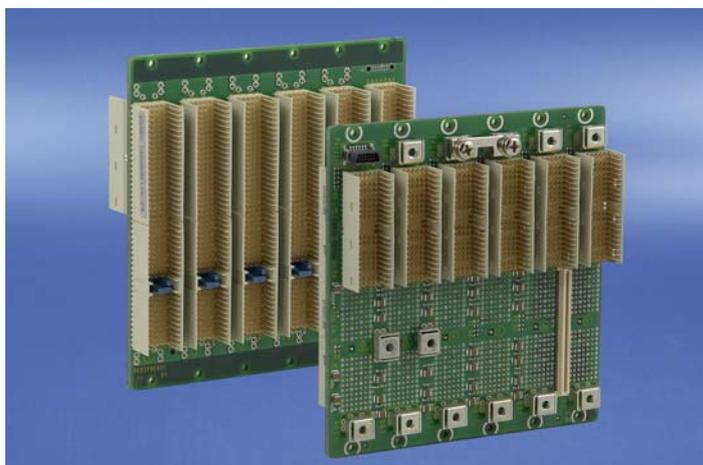
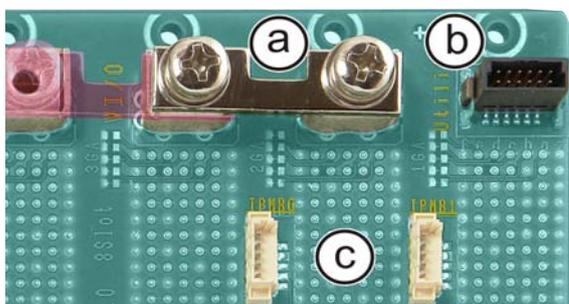


Illustration shows 23006-816

12408001



a: V(I/O) bridge
b: utility connector
c: IPMB connector

12408002



ServicePLUS see page 10.31

- Conforms to
 - PICMG 2.0 R3.0 CompactPCI core specification
 - PICMG 2.1 R2.0 Hot-swap Specification
 - PICMG 2.9 R1.0 System Management Bus Specification
 - PICMG 2.10 R1.0 Keying Specification
- Versions: 3 U 32-bit and 64-bit, 6 U 64-bit, with system slot to left
- V (I/O) on +3.3 V or +5 V adjustable (see illustration)
- Backplanes with up to 5 slots are capable of 66 MHz, 6 to 8 slot backplanes are set to 33 MHz operation
- External layers designed as GND surfaces
- Outstanding high-frequency noise suppression and very high MTBF values due to ceramic capacitors
- Multiple backplanes may be placed side by side without loss of slots
- Connection or isolation between the digital GND and chassis GND can be effected via the screw fittings
- Supply voltages applied via powerbugs (ring tag M4), FASTONs or P47 connectors
- Utility connector for status signals (SMCQ)
- Intelligent platform management bus (IPMI) connector to PICMG 2.9

Delivery comprises

Item	Qty	Description
1	1	CompactPCI backplane
2	1	Set of M4x6 bolts, with disc spring washer; for power connection

Order Information

Number of slots	Width mm	3 U, 32-bit, CompactPCI backplane		3 U, 64-bit, CompactPCI backplane		6 U, 64-bit, CompactPCI backplane	
		3.3 V V(I/O) Part no.	5 V V(I/O) Part no.	3.3 V V(I/O) Part no.	5 V V(I/O) Part no.	3.3 V V(I/O) Part no.	5 V V(I/O) Part no.
1	19.3	23006-331	23006-811	23006-331	23006-811	-*	-*
2	39.6	-*	-*	23006-422	23006-732	-*	-*
4	80.3	-*	-*	23006-424	23006-734	23006-444	23006-764
5	100.6	-*	-*	-*	-*	23006-445	23006-765
6	121.0	-*	-*	-*	23006-736	-*	-*
8	161.6	23006-408	23006-718	23006-428	23006-738	23006-448	23006-768
Kit to convert V I/O to 3,3 V 8 coding tabs, yellow, coding key, PU 1 kit							21101-658
ATX cable Length 250 mm, 20-pin ATX plug on ring terminal M4, 1 piece							23204-121
Utility cable SMCQ with flat ribbon cable, length 350 mm, 2 × 12-pin Female connector, 1 piece							23204-115
Utility cable SMCQ with flat ribbon cable, length 600 mm, 2 × 12-pin Female connector, 1 piece							23204-116
Termination adaptor, 32-bit bus for 8 slot CompactPCI backplane, 1 piece							23006-930
Termination adaptor, 64-bit bus for 8 slot CompactPCI backplane, 1 piece							23006-931
SM bus/IPMI cable 4 individual wires with SMB plug to open end, length 750 mm, 1 piece							23204-113

Note

- 4 to 7 slot backplanes can be used as primary backplane with bridge (bridge for system slot left available on request)
- Types marked with an asterisk * are available on request
- Screws, washers for backplane fitting see page 10.30

Backplanes – CompactPCI

CompactPCI backplanes

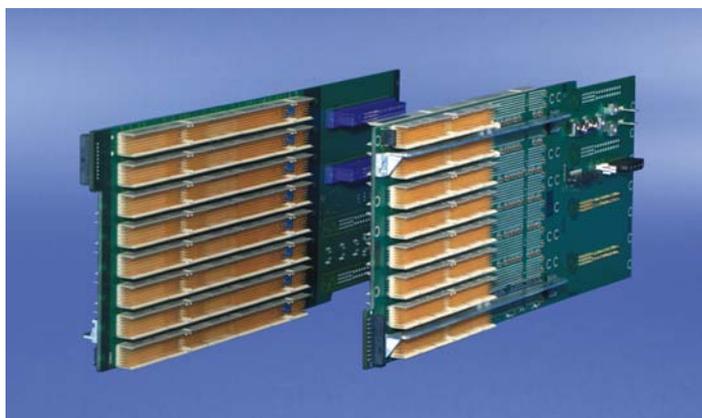


Illustration shows 23006-797

12405002

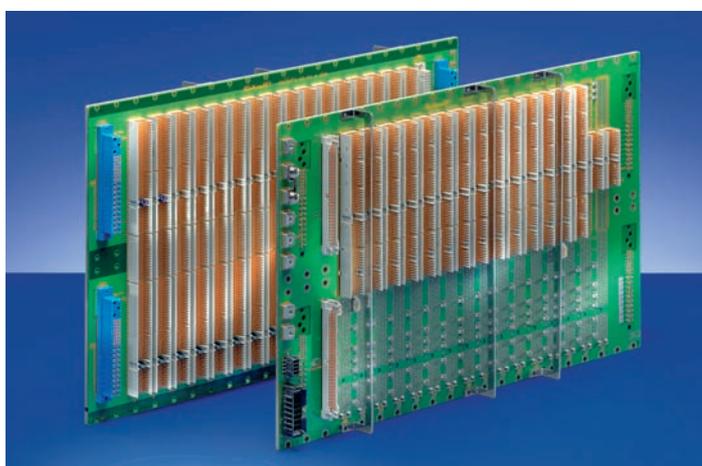


Illustration shows 23006-610

12405005



ServicePLUS see page 10.31

Order Information

Number of slots	CompactPCI backplanes	Power connector	Data connection	Part no.
1	I/O, connects J4 and J5 from front to rear I/O board	without	Rear I/O	23090-719
2	System slot left, for horizontal mounting	ATX (male) connector	64-bit CompactPCI bus	23006-792
2	System slot left, for horizontal mounting	Mini-fit 10-pin	64-bit CompactPCI bus	–*
2	System slot left, for horizontal mounting	1 x P47	64-bit CompactPCI bus	23006-794
4	System slot left, for horizontal mounting	Mini-fit 24-pin	64-bit CompactPCI bus	–*
4	System slot left, for horizontal mounting	2 x P47	64-bit CompactPCI bus	–*
4	System slot left, for horizontal mounting	2 x P47	64-bit CompactPCI bus, H.110 bus	23006-615
6	System slot left, for horizontal mounting	Mini-fit 24 pin	64-bit CompactPCI bus	–*
6	System slot left, for horizontal mounting	2 x P47 (optional third connector)	64-bit CompactPCI bus	23006-796
8	System slot left, for horizontal mounting	2 x P47 (optional third and fourth connectors)	64-bit CompactPCI bus	23006-797
8	System slot left, for horizontal mounting	2 x P47 (optional third and fourth connectors)	64-bit CompactPCI bus, H.110 bus, PSB	23006-611
8	System slot on the right, for 6 U CompactPCI system, power input without loss of slot	Powerbugs	64-bit CompactPCI bus, H.110 bus	23006-601
16	System slot to right, for 6 U CompactPCI system, incl. 2 slots for Schroff CMM, 2 independent CPCI segments, 7 slots each	2 x P47, one above the other	2 x 64-bit CompactPCI bus, 7 slot each, PSB	23006-610

- Conforms to
 - PICMG 2.0 R3.0 CompactPCI Core Specification
 - PICMG 2.1 R2.0 Hot-swap Specification
 - PICMG 2.9 R1.0 System Management Bus Specification
 - PICMG 2.10 R1.0 Keying Specification
 - PICMG 2.5 Computer Telephony Specification (H.110)
 - PICMG 2.16 CompactPCI Packet-Switching Backplanes
 - PICMG 2.11 CompactPCI Power Interface Specification
- Various versions
 - CompactPCI, packet switching, H.110
 - Backplanes for vertical mounting and backplanes for horizontal mounting including slots for plug-in power supply units (P47)
- V (I/O) on +3.3 V or +5 V adjustable
- Backplanes with up to 5 slots are capable of 66 MHz, 6 to 8 slot backplanes are set to 33 MHz operation
- External layers designed as GND surfaces
- Outstanding high-frequency noise suppression and very high MTBF values due to ceramic capacitors
- Connection or isolation between the digital GND and chassis GND can be effected via the screw fittings
- Utility connector for status signals
- Intelligent platform management bus (IPMI) connector to PICMG 2.9

Delivery comprises

Item	Qty	Description
1	1	CompactPCI backplane
2	1	Set of M4x6 bolts, with disc spring washer; for power connection

Note

■ Types marked with an asterisk * are available on request
Part number in bold face type: ready for despatch within 2 working days
 Part number in normal type: ready for despatch within 10 working days

Backplanes – CompactPCI

CompactPCI bridges



Illustration shows 32-bit and 64-bit bridges

12402002

- Conforms to
 - PICMG 2.6 CompactPCI Bridging Specification
 - PCI 2.1 PCI Local Bus Specification, Rev. 2.1
- Bridge mounted on rear of backplane, hence no loss of slots
- Very compact and low bridge shape, no interference with rear transition boards
- Schroff CompactPCI backplanes with system slot to the right are used as primary backplane
- The 32-bit bridge is 33 MHz capable and the 64-bit bridge is 33/66 MHz capable
- Bridges are designed for primary backplanes with system slot to right; bridges for system slot to left available on request
- A summary of possible backplane/bridge combinations can be found on the Schroff website

Delivery comprises

Item	Qty	Description
1	1	Bridge

Order Information

Description	Part no.
CompactPCI bridge, 32 bit, 33 MHz, for system slot right	23006-920
CompactPCI bridge, 64-bit, 33/66 MHz, for system slot right	23006-922



For further information www.schroff.biz/oneclick
oneClick search code = Part no.



Open Modular
Computing Specifications



ServicePLUS see page 10.31

Backplanes – CompactPCI

Secondary CompactPCI backplanes, system slot to the right



Illustration shows primary and secondary backplane with inserted bridge and fitted rear transition board

12401021



ServicePLUS see page 10.31

- Conforms to:
 - PICMG 2.0 R3.0 CompactPCI Core Specification
 - PICMG 2.1 R2.0 Hot-swap Specification
 - PICMG 2.9 R1.0 System Management Bus Specification
 - PICMG 2.10 R1.0 Keying Specification
- Secondary backplane for use behind the bridge
- A summary of possible backplane/bridge combinations can be found on the Schroff website
- Secondary backplanes can also be used as tertiary backplanes. Change of geographical address, see user manual

Delivery comprises

Item	Qty	Description
1	1	CompactPCI backplane
2	1	Kit screws M4 x 6, with lock washers, for power connection

Order Information

Number of slots	Height	Description	Part no.
	U		
4	3	32-bit	23006-824
7	3	32-bit	23006-827
4	3	64-bit	23006-854
7	3	64-bit	23006-857
4	6	64-bit	23006-884
7	6	64-bit	23006-887

Note

- Other configurations available on request or via www.schroff.co.uk/configuration
- Screws, washers for backplane fitting see page 10.30



For further information www.schroff.biz/oneclick
oneClick search code = Part no.

Backplanes – CompactPCI

CompactPCI Express backplane



12406003



12409050

Backplane topology

- Conforms to
 - PICMG 2.0 R3.0 CompactPCI Core Specification
 - PICMG EXP.0 R1.0
- Combination of the parallel CompactPCI bus and the serial CompactPCI Express on one backplane
- One CompactPCI and one CompactPCI Express system slot in centre of backplane
- CPCI Express system slot in 4-link configuration
- V(I/O) on +3.3 V or +5 V adjustable, +5 V preset
- Outstanding high-frequency noise suppression and very high MTBF values due to ceramic capacitors
- Connection or isolation between the digital GND and chassis GND can be effected via the screw fittings
- 1 utility connector for CompactPCI and 1 utility connector for CompactPCI Express
- Intelligent platform management bus (IPMI) connector to PICMG 2.9

Delivery comprises

Item	Qty	Description
1	1	CompactPCI Express backplane
2	1	Set of M4x6 bolts, with disc spring washer; for power connection

Order Information

Number of slots	Width mm	Height U	Description	Part no.
8	162.0	3	4 legacy CPCI slots, system slot to right, 4 CPCI Express slots, system slot to left	23007-501
6	121.0	3	3 legacy CPCI slots, system slot to right, 3 CPCI Express slots, system slot to left	-*
Kit to convert V I/O to 3,3 V 8 coding tabs, yellow, coding key, PU 1 kit				21101-658
ATX cable Length 250 mm, 20-pin ATX plug on ring terminal M4, 1 piece				23204-121
Utility cable MicroMatch with single conductors, length 600 mm, 1 piece				23204-812
Utility cable MicroMatch with flat ribbon cable, length 600 mm, 1 piece				23204-811
SM bus/IPMI cable 4 individual wires with SMB plug to open end, length 750 mm, 1 piece				23204-113

Note

- Other configurations available on request or via www.schroff.co.uk/configuration
- Types marked with an asterisk * are available on request
- Screws, washers for backplane fitting see page 10.30



For further information www.schroff.biz/oneclick
oneClick search code = Part no.



ServicePLUS see page 10.31

Backplanes – PXI backplanes

PXI backplanes



Illustration shows 23006-578

12402004



ServicePLUS see page 10.31

- Conforms to
 - PXI Specification R 2.0
 - PICMG 2.0 R3.0 CompactPCI Core Specification
 - PICMG 2.1 R2.0 Hot-swap Specification
 - PICMG 2.9 R1.0 System Management Bus Specification
 - PICMG 2.10 R1.0 Keying Specification
- 64-bit CompactPCI bus and PXI bus on the P2 plane
- Clock generated on the backplane; feeding in an external clock is possible, the backplane switches automatically between the two clocks
- Backplanes with up to 5 slots are capable of 66 MHz, to 8 slot backplanes are set to 33 MHz operation
- Outstanding high-frequency noise suppression and very high MTBF values due to ceramic capacitors
- Utility connector for status signals
- Intelligent platform management bus (IPMI) connector to PICMG 2.9

Delivery comprises

Item	Qty	Description
1	1	PXI backplane
2	1	Kit screws M4 x 6, with lock washer, for power connection

Order Information

Number of slots	System slot		3.3 V V(I/O)		5 V V(I/O)	
			Part no.	Part no.	Part no.	Part no.
5	left	primary	23006-475	23006-575		
7	left	primary	–*	23006-577		
8	left	primary	23006-478	23006-578		
7	left	secondary	–*	23006-587		
4	left	tertiary	23006-494	23006-594		
7	left	tertiary	–*	23006-597		

Note

- Other configurations available on request or via www.schroff.co.uk/configuration
- Types marked with an asterisk * are available on request
- Screws, washers for backplane fitting see page 10.30

PXI bridge



Delivery comprises

Item	Qty	Description
1	1	PXI bridge

Order Information

Description	Description	Part no.
PXI bridge	64-bit, 33/66 MHz	23006-924

Backplanes – Power backplanes

Power backplanes with P47 connector



11902001



11901002

- Conforms to
 - PICMG 2.9 R1.0 System Management Bus Specification
 - PICMG 2.11 R1.0 CompactPCI Power Interface Specification
- Can be switched in parallel, PSU status signals FAL# and DEG# can be read separately
- Geographical address adjustable
- Mains supply via crimp contacts insertable into plug, no mains voltage on the backplane

Delivery comprises

Item	Qty	Description
1	1	Powerbackplane with 1 resp. 2 P 47 connectors
2	1/2	AC cable harness (P47 connector – open end, length 500 mm; 2 pieces at 2 P47 pin positions)
3	1/2	DC cable harness (ATX connector – ATX ring tag, length 250 mm; 2 pieces at 2 P47 pin positions)
4	1	Blade receptacle kit for AC cable harness

Order Information

Number of slots	Width mm	Height U	Description	Part no.
1	39.6	3	1 connector position P47	23098-105
2	80.3	3	2 connector positions P47 (side-by-side)	23098-115
1	39.6	6	1 connector position P47 at top	23098-116
1	39.6	6	2 connector positions P47 (one above the other)	23098-117

Note

- Screws, washers for backplane fitting see page 10.30



ServicePLUS see page 10.31

Power piggyback



12401002

- Allows connection of pluggable power supplies, e.g. ATX PSUs, to CompactPCI backplanes
- Simply mounts on the PSU screw connections on the rear of Schroff CompactPCI backplanes

Delivery comprises

Item	Qty	Description
1	1	Power piggyback

Order Information

Description	Qty/PU	Part no.
Power piggyback	1	23098-100

Backplanes – Universal

Universal backplanes



Universal backplanes without through-connected signal lines, 10 and 21 slot 12096003



Universal backplanes without through-connected signal lines, 21 slots 12006001



ServicePLUS see page 10.31

With through-connected signal lines

- Power supply at each connector position (row 1 + 32)
- Adaptation fields for power connections on 2-layer backplanes
- Two versions:
 - 60 signal lines, through-connected from connector to connector (C64), row „b“ can be freely wired (2 layers with C96 connector), wire-wrap
 - 90 signal lines, through-connected from connector to connector

Without through-connected signal lines

- Individual wiring of connectors is possible since signal lines are not through-connected
- Power supply at each connector position (row 1 + 32)
- Adaptation fields for connections

Delivery comprises

Item	Qty	Description
1	1	Universal backplane
2	10	Bridges, grid 5.08 mm
3	3	Jumpers
4	1	10-pin header

Order Information

with through-connected signal lines

No. of slots	Slot pitch HP	Width HP	No. of layers	Connector type	No. of signal lines	Part no.
10	4	42	2	C64F	60	23007-010
10	4	42	2	C96F	60	23007-040
10	4	42	4	C96F	90	23007-410
14	3	42	2	C64F	60	23007-114
14	3	42	2	C96F	60	23007-144
21	4	84	2	C64F	60	23007-021
21	4	84	2	C96F	60	23007-051
21	4	84	2	–	60	23007-081
21	4	84	4	C96F	90	23007-421
28	3	84	2	C96F	60	23007-158
28	3	84	2	C64F	60	23007-128
28	3	84	2	–	60	23007-188

Connector not fitted, mounting position for C96F connection

Order Information

without through-connected signal lines

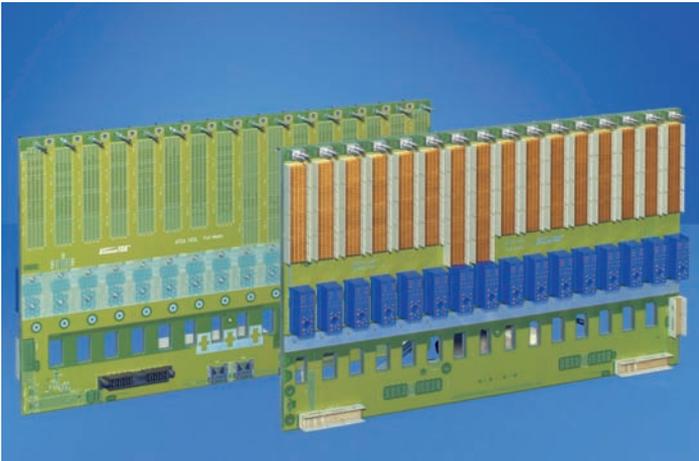
Number of slots	Slot pitch HP	Width HP	Number of layers	Part no.
21	4	84	2	23007-222

Note

- Screws, washers for backplane fitting see page 10.30

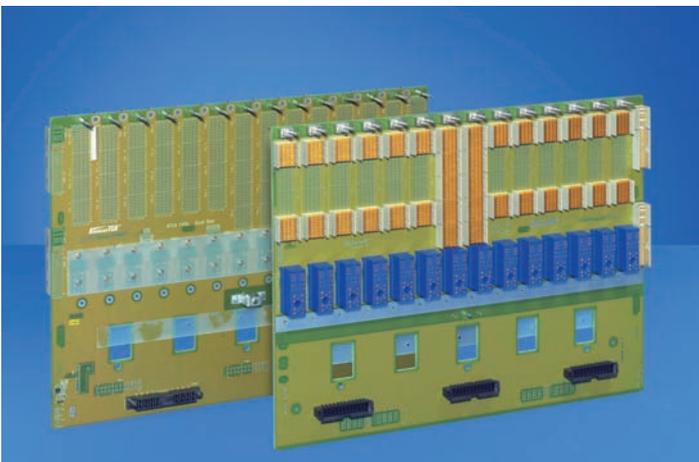
Backplanes – AdvancedTCA

AdvancedTCA backplanes



Full mesh (picture shows order no. 23005-321)

12606003

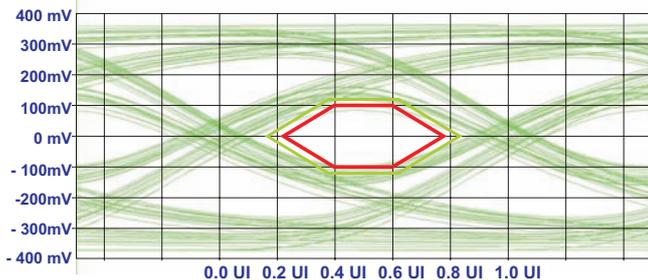


Dual star (picture shows order no. 23005-315)

12606002

Eye Pattern @ 10.0 Gbps vs. XAUI spec

Bit Pattern: PRBS Data Rate: 10.0 Gbps Pair: 01P21_GH05-16P23_EF03
 Rise Time: 20ps Pattern Length: 2⁷-1 trace info: na



12707056

Eye pattern at 10.0 Gbps to Xaui specification, without signal conditioning

- Conforms to
 - PICMG 3.0 R3.0 AdvancedTCA Base Specification
 - PICMG 3.1 R1.0 Ethernet/Fibre Channel
 - PICMG 3.2 R1.0 InfiniBand
 - PICMG 3.3 R1.0 StarFabric
 - PICMG 3.4 R1.0 PCI Express
 - PICMG 3.5 R1.0 RapidIO
- Data rate: Min. 10 Gb per differential pair
- Topologies: Full-mesh, replicated mesh, dual star and ring/daisy chain
- Bused or radial IPMB
- 2 power feeds, A and B, galvanically isolated
- Each power feed split into sub-domains, each with max. rated current 25 A (safety aspect)

Delivery comprises

Item	Qty	Description
1	1	AdvancedTCA backplane

Order Information

Number of slots	Topology	IPMI	Shelf type	Part no.
5	Full mesh	bused	horizontal	23005-331
5	Full mesh	radial	horizontal	23005-329
14	Dual Star	bused	BFS	-*
14	Dual Star	bused	TFS	-*
14	Dual Star	radial	BFS	-*
14	Dual Star	radial	TFS	-*
14	Full Mesh	bused	BFS	-*
14	Full Mesh	bused	TFS	-*
14	Full Mesh	radial	BFS	-*
14	Full Mesh	radial	TFS	-*
16	Dual Star	bused	TFS	-*
16	Dual Star	radial	TFS	-*
16	Full Mesh	bused	TFS	-*
16	Full Mesh	radial	TFS	-*

Shelf type: horizontal: horizontal board cage, side-to-side ventilation
 BFS: Bottom Fan Shelf: backplane for AdvancedTCA shelf with fans beneath the board cage
 TFS: Top Fan Shelf: backplane for AdvancedTCA shelf with fans above the board cage

Note

- Other configurations available on request or via www.schroff.co.uk/configuration
- Types marked with an asterisk * are available on request
- Screws, washers for backplane fitting see page 10.30



For further information www.schroff.biz/oneclick
 oneClick search code = Part no.



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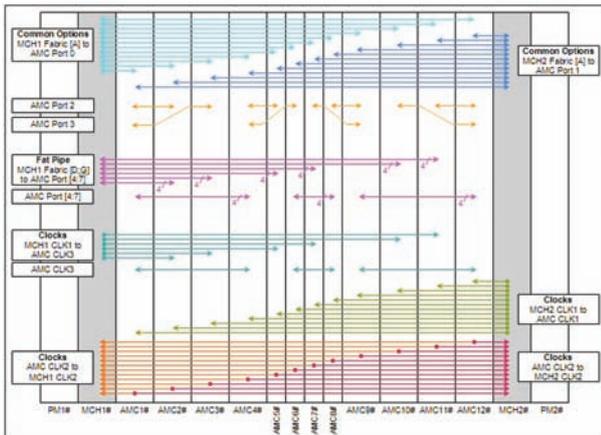
ServicePLUS see page 10.31

Backplanes – MicroTCA

MicroTCA backplanes for subracks



Illustration shows 3 U version, 23005-414



Backplane topology 23005-414, 23005-415

- Conforms to
 - PICMG MicroTCA R1.0 Base Specification
 - PICMG AMC.0 R1.0 or AMC.0 R2.0 AdvancedMC Base Specification
 - PICMG AMC.1 R1.0 PCI Express and Advanced Switching
 - PICMG AMC.2 R1.0 Ethernet
 - PICMG AMC.3 R1.0 AMC Storage
- Data rate: 12.5 Gb per differential pair
- Topologies: Dual-star, star and full-mesh
- Various CLK topologies in accordance with PICMG AMC.0 R1.0 or R2.0
- Radial IPMB-L to all AdvancedMC slots, redundantly based IPMB-0 between MCHs, cooling units and power modules
- One carrier FRU SEEPROM each and the carrier number linked via I²C bus to the MCH

Delivery comprises

Item	Qty	Description
1	1	MicroTCA backplane

Note

- Types marked with an asterisk * are available on request
- User manual: Please enter order number at www.schroff.biz/oneclick



Order Information

Slot configuration PM + MCH + AMC slots	Topology					Description	Part no.
	GbE	Storage interface	Fat pipe	Extended fat pipe	Clocks		
2 FS + 2 FS + 12 (8 FS, 4 CP)	Dual Star	Direct connections	Radial to MCH1 and direct connections	–	AMC CLK1 radial to MCH2 CLK1, AMC CLK2 radial to both MCH CLK2, AMC CLK3 radial to MCH1 CLK1 or direct connections	Including fan plug, for single modules	–*
2 FS + 2 FS + 12 (8 FS, 4 CP)	Dual Star	Direct connections	Radial to MCH1 and direct connections	–	AMC CLK1 radial to MCH2 CLK1, AMC CLK2 radial to both MCH CLK2, AMC CLK3 radial to MCH1 CLK1 or direct connections	For double modules	23005-414
2 FS + 2 FS + 12 (8 FS, 4 CP)	Dual Star	Direct connections	Radial to MCH1 and direct connections	–	AMC CLK1 radial to MCH2 CLK1, AMC CLK2 radial to both MCH CLK2, AMC CLK3 radial to MCH1 CLK1 or direct connections	For single modules	23005-415
2 (9 HP) + 2 FS + 9 FS	Dual Star	Direct connections	Radial to MCH1	Radial to MCH2	AMC CLK1 radial to MCH2 CLK1, AMC CLK2 radial to both MCH CLK2, AMC CLK3 radial to MCH2 CLK1 or direct connections	Includes 2 plugs for cooling units, for single modules	–*
2 (9 HP) + 2 FS + 9 FS	Dual Star	Direct connections	Radial to MCH1	Radial to MCH2	AMC CLK1 radial to MCH2 CLK1, AMC CLK2 radial to both MCH CLK2, AMC CLK3 radial to MCH2 CLK1 or direct connections	Including fan plug, for single modules	–*
Without PM + 1 FS + 4 FS	Radial	Direct connections	Radial to MCH1	–	AMC CLK1 to MCH CLK1, AMC CLK2 to MCH CLK2, AMC CLK3 to MCH CLK3	12V and 3.3V activation of slots via presence signals	–*
2 (12 HP) + 2 FS + 10 FS	Dual Star	Direct connections	Radial to MCH1	Radial to MCH2	AMC TCLKA, B to MCH1 CLK1, 2; AMC TCLKC, D to MCH2 CLK1, 2; AMC FCLKA to MCH1 CLK3	Includes 2 plugs for cooling units, for single modules	–*
2 (12 HP) + 2 FS + 12 MS	Dual Star	Direct connections	Radial to MCH1	Radial to MCH2	AMC TCLKA, B to MCH1 CLK1, 2; AMC TCLKC, D to MCH2 CLK1, 2; AMC FCLKA to MCH1 CLK3	J-TAG signals radial to JSM slot	–*

Test adaptors

Test adaptors, type B

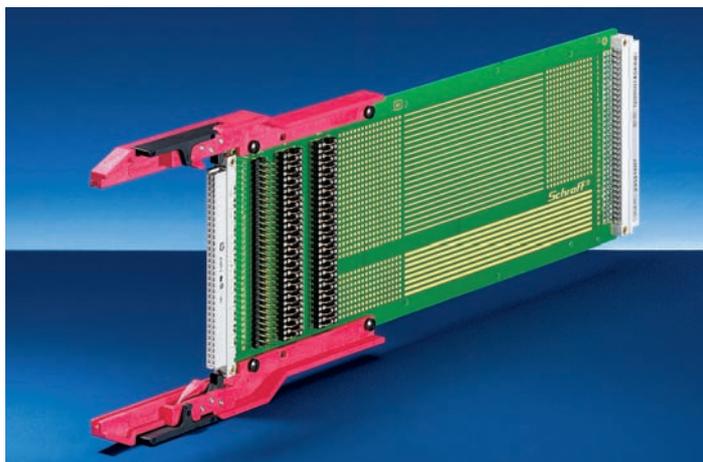


Illustration shows 23021-607

11100018

- For DIN 41612 connectors, type B
- Measuring field for current and voltage measurement (U/I), (a)
- Header with pin diameter 0.6 mm for wire wrap (b)
- Outer pin rows (pin 1a, c and pin 32a, c) with wider tracks for power supply (2 A per track)

Delivery comprises

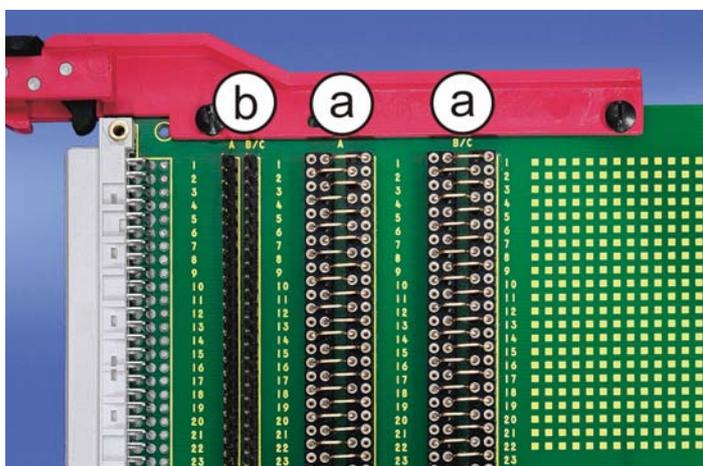
Item	Qty	Description
1	1	Test adaptor with fitted guide rails and equipped test bridges
2	10	Replacement test bridges

Order Information

Connector type	Height U	For board depth mm	Type	Measuring field for	Part no.
B64	3	160	1L	U / I	23021-607
B64	3	220	1L	U / I	23021-651

Note

- For detailed dimensions and test adaptor type see page 10.30
- 6/9 U test adaptors see page 10.28



a: Measuring field for current and voltage measurement
b: Header for wire wrap

11100019



For further information www.schroff.biz/oneclick
oneClick search code = Part no.



ServicePLUS see page 10.31

Test adaptors

Test adaptors, type C

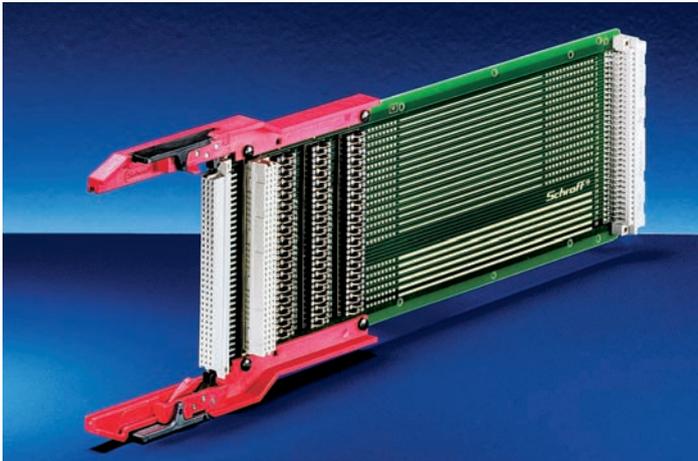
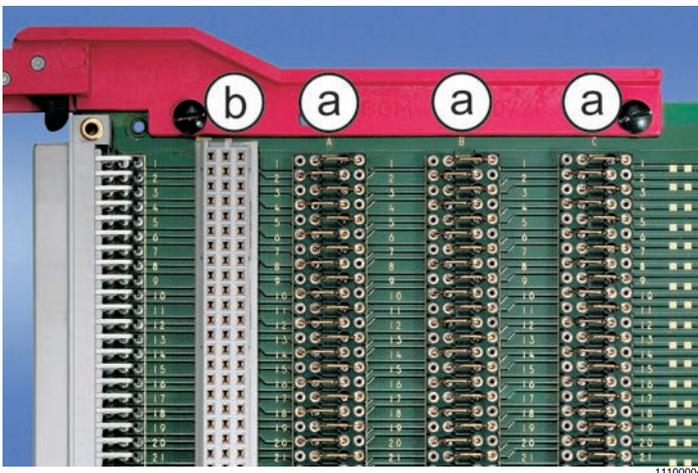


Illustration shows 23021-609



a: Measuring field for current and voltage measurement
b: Connector position for a second test object



ServicePLUS see page 10.31

- For DIN 41612 connectors, type C
- 2 different measuring fields:
 - current and voltage measurement (U/I):
pluggable test bridges
 - voltage measurement (V):
soldered test bridges
- Connector type C64:
Header with pin diameter 0.6 mm for wire wrap
- Connector type C96:
Slot for second test unit or terminator board (b)
- Outer pin rows (C96: pin 1a, b, c and pin 32a, b, c; C64: pin 1a, c and pin 32a, c) with wider tracks for power supply (2 A per track)

Delivery comprises

Item	Qty	Description
1	1	Test adaptor with fitted guide rails and equipped test bridges
2	10	Replacement test bridge

Order Information

Connector type	Height	For board depth	Type	Measuring field for	Part no.
	U	mm			
C 64	3	160	1L	U / I	23021-608
C 64	3	220	2L	U / I	23021-652
C 64	6	160	1L	U / I	23022-601
c64	6	220	2L	U / I	23022-651
C 96	3	160	2L	U	23021-603
C 96	3	160	2L	U / I	23021-609
C 96	3	160	4L	U / I	23021-610
C 96	3	220	2L	U / I	23021-653
C 96	3	220	4L	U / I	23021-654
C 96	3	280	2L	U / I	23021-700
C 96	3	280	4L	U / I	23021-701
C 96	3	340	4L	U / I	23021-750
C 96	6	160	2L	U / I	23022-602
C 96	6	160	4L	U / I	23022-603
C 96	6	220	2L	U / I	23022-652
C 96	6	280	2L	U / I	23022-700

Note

- For detailed dimensions and test adaptor type see page 10.30
- 6/9 U test adaptors see page 10.28



For further information www.schroff.biz/oneclick
oneClick search code = Part no.

Test adaptors

Test adaptors, type D

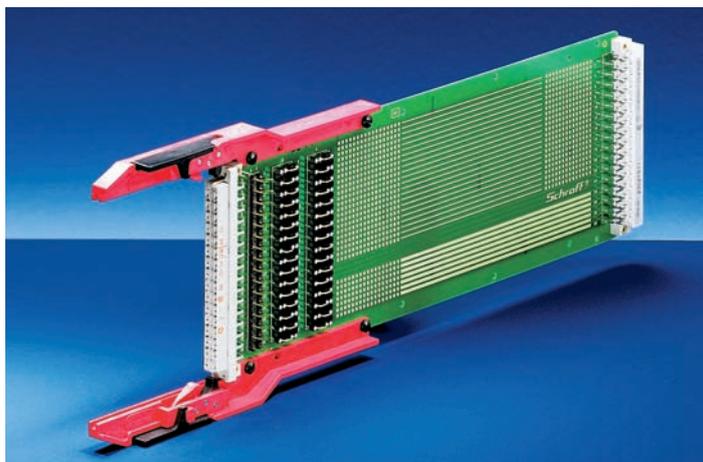
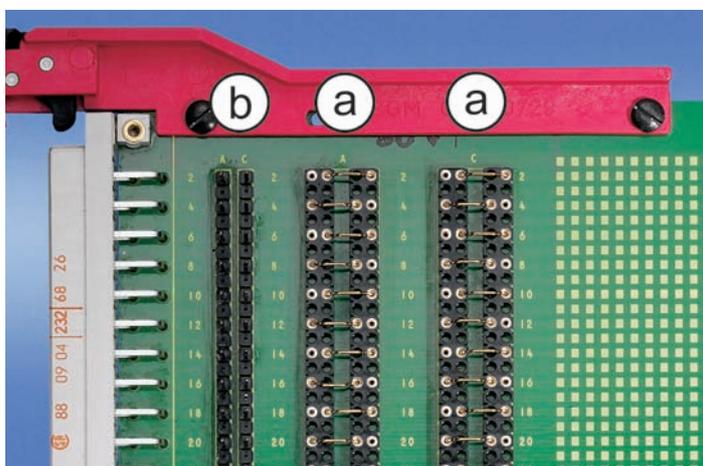


Illustration shows 23021-611

11100005



a: Measuring field for current and voltage measurement
b: Header for wire wrap

11100005

- For DIN 41612 connectors, type D
- 2 different measuring fields:
 - current and voltage measurement (U/I): pluggable test bridges
 - voltage measurement (V): soldered test bridges
- Header with pin diameter 0.6 mm for wire wrap (b)
- Outer pin rows (pin 1a, c and pin 16a, c) with wider tracks for power supply (2 A per track)

Delivery comprises

Item	Qty	Description
1	1	Test adaptor with fitted guide rails and equipped test bridges
2	10	Replacement test bridges

Order Information

Connector type	Height U	For board depth mm	Type	Measuring field for	Part no.
D32	3	160	1L	U / I	23021-611
D32	3	160	1L	U	23021-604
D32	3	220	1L	U / I	23021-655

Note

- Test adaptor type D cannot be used in combination with the adapter of other types
- For detailed dimensions and test adaptor type see page 10.30



ServicePLUS see page 10.31

Test adaptors

Test adaptors, type E

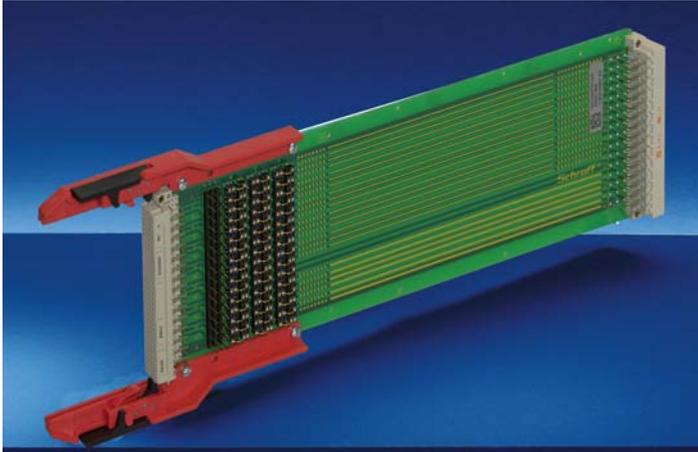
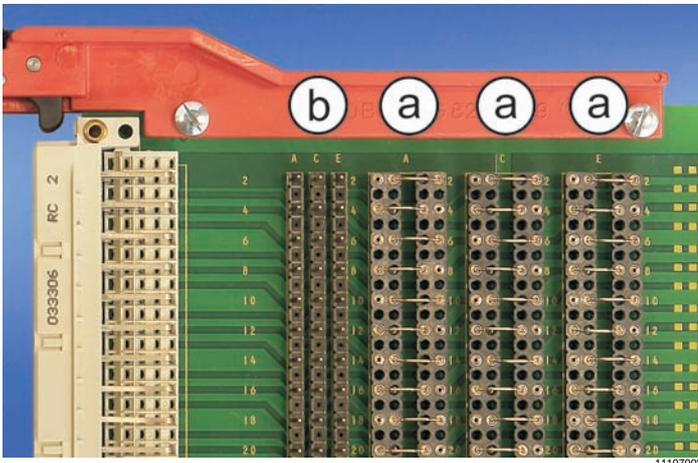


Illustration shows 23021-656



a: Measuring field for current and voltage measurement
b: Header for wire wrap

- For DIN 41612 connectors, type E
- Measuring field for current and voltage measurement (U/I), (a)
- Header with pin diameter 0.6 mm for wire wrap (b)
- Outer pin rows (pin 1a, c, e and pin 31a, c, e) with wider tracks for power supply (2 A per track)

Delivery comprises

Item	Qty	Description
1	1	Test adaptor with fitted guide rails and equipped test bridges
2	10	Replacement test bridges

Order Information

Connector type	Height U	For board depth mm	Type	Measuring field for	Part no.
E48	3	220	2L	U / I	23021-656

Note

- For detailed dimensions and test adaptor type see page 10.30
- 6/9 U test adaptors see page 10.28



ServicePLUS see page 10.31

Test adaptors

Test adaptors, type F



Illustration shows 23021-613

11100008

- For DIN 41612 connectors, type F
- 2 different measuring fields:
 - current and voltage measurement (U/I): pluggable test bridges
 - voltage measurement (V): soldered test bridges
- Header with pin diameter 0.6 mm for wire wrap (b)
- Outer pin rows (pin 1a, c, e and pin 16a, c, e) with wider tracks for power supply (2 A per track)

Delivery comprises

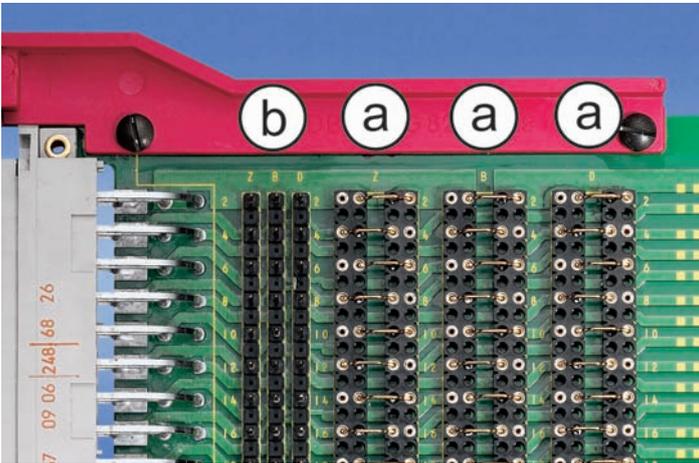
Item	Qty	Description
1	1	Test adaptor with fitted guide rails and equipped test bridges
2	10	Replacement bridges

Order Information

Connector type	Height U	For board depth mm	Type	Measuring field for	Part no.
F48	3	160	2L	U	23021-605
F48	3	160	2L	U / I	23021-613
F48	6	160	2L	U / I	23022-604
F48	3	220	2L	U / I	23021-657

Note

- For detailed dimensions and test adaptors type see page 10.30
- Further 6/9 U test adaptors see page 10.28



11100009

- a: Measuring field for current and voltage measurement
- b: Header for wire wrap



ServicePLUS see page 10.31

Test adaptors

Test adaptors, type H

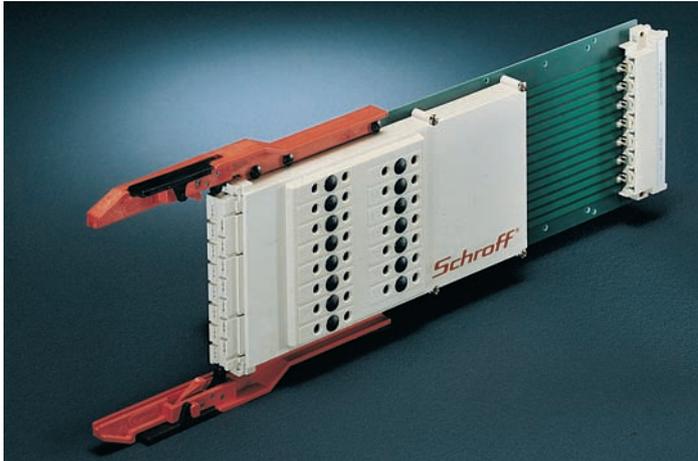


Illustration shows 23021-621

11193001

- For DIN 41612 connectors, type H
- 2 different measuring field versions:
 - voltage and current (U/I): pluggable test bridges (diameter 4 mm) (a)
 - for voltage (V): test socket (diameter 4 mm)

Delivery comprises

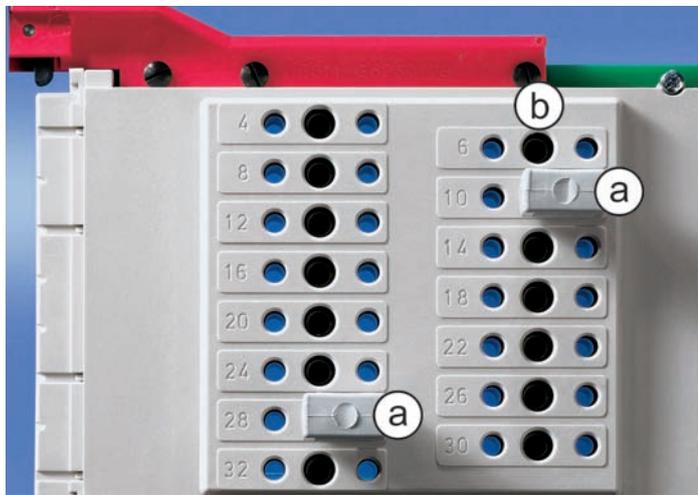
Item	Qty	Description
1	1	Test adaptor with fitted guide rails and equipped test bridges

Order Information

Connector type	Height	For board depth mm	Type	Measuring field for	Part no.
	U				
H15	3	160	1L	U	23021-621
H15	3	160	1L	U / I	23021-615
H15	3	220	1L	U / I	23021-658

Note

- For detailed dimensions and test adaptors type see page 10.30
- 6/9 U test adaptors see page 10.28



a: Test bridge 4 mm
b: Test socket 4 mm

11100012



ServicePLUS see page 10.31

Test adaptors

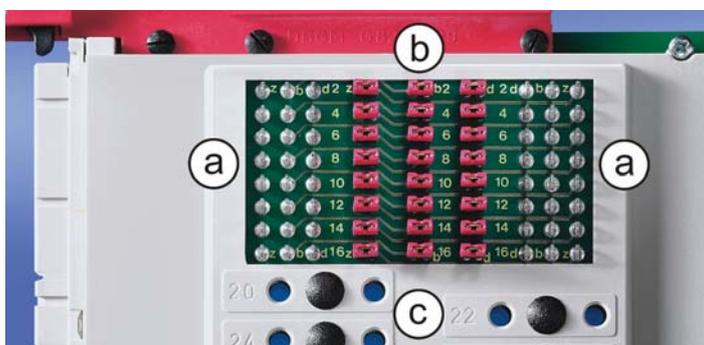
Test adaptors, type M



Illustration shows 23021-616

11100013

- For DIN 41612 connectors, type M
- 2 versions:
 - M (F/H): with high-current contacts (H)
 - M (C/coax): with coaxial connector contact
- Measuring field for current and voltage measurement (U/I) measuring field versions M (F/H):
 - F: measurement lugs (a) and measurement pins (b) with jumpers
 - H: test bridges (c) (diameter 4 mm)
 - M (C/coax):
 - C: test bridge pluggable, header with pin diameter 0.6 mm for wire wrap



Test adaptor M (F24/H7),
a: Measurement lugs,
b: Measurement pins with jumper, c: Test bridges, diameter 4 mm

11100014

Delivery comprises

Item	Qty	Description
1	1	Test adaptor with fitted guide rails and equipped test bridges
2	10	Replacement test bridges

Order Information

Connector type	Height U	For board depth mm	Type	Measuring field for	Part no.
M (F24/H7)	3	160	2L	U / I	23021-616
M (F24/H7)	3	220	2L	U / I	23021-660
M (C24/8 coax)	3	220	2L	U / I	23021-670
M (C42/6 coax)	3	220	2L	U / I	23021-671
M (C60/4 coax)	3	220	2L	U / I	23021-672
M (C78/2 coax)	3	220	2L	U / I	23021-673

Note

- For detailed dimensions and test adaptor type see page 10.30



For further information www.schroff.biz/oneclick
oneClick search code = Part no.

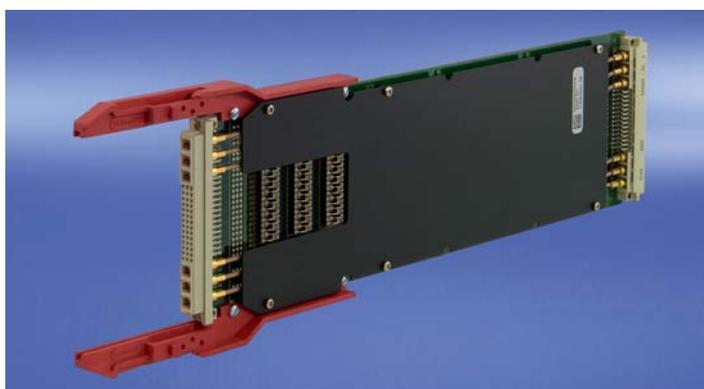
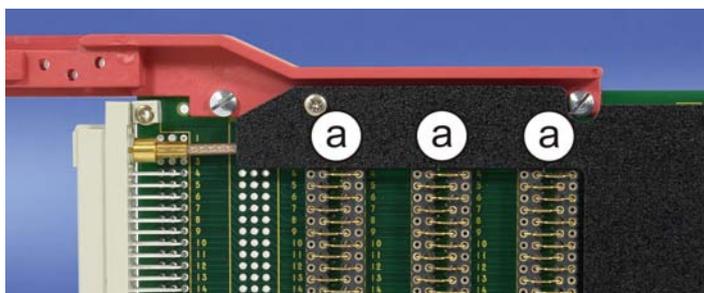


Illustration shows test adaptor 23021-671

11109002



Test adaptor M (C78/2 coax)
a: Measuring field for current and voltage measurement

11109005



ServicePLUS see page 10.31

Test adaptors

Test adaptors for VMEbus



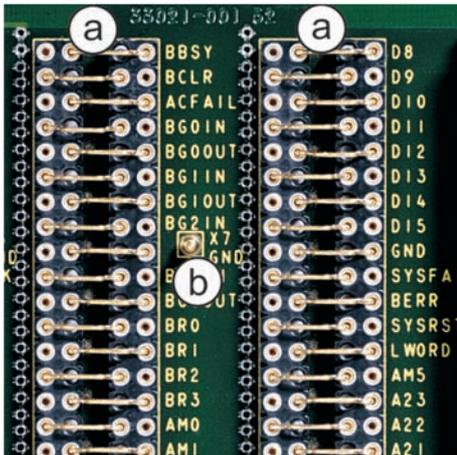
Illustration shows 6 U test adaptor

11192004

- Layout of conductive tracks and layer build-up match the requirements of the VME bus
- Measuring field version for current and voltage measurement (V/I), (a)
- Additional measuring pins, e.g. for the probe tips of an oscilloscope (b)
- 1 pin position for second test object,
1 pin position for terminator board
- Voltage supply lines are designed for 2 A
- 6 U test adaptors consist of two 3 U test adaptors linked via an intermediate adaptor

Delivery comprises

Item	Qty	Description
1	1	Test adaptor with fitted guide rails and equipped test bridges
2	10	Replacement test bridges



a: Measurement field for current and voltage measurement
b: Measuring pin for e.g. probe tip

11196001

Order Information

Height U	For board depth mm	Connector type		Part no.
		P1	P2	
3	160	C96	–	23021-001
3	160	–	C64	23021-102
3	160	–	C96	23021-100
3	220	C96	–	23021-002
3	220	–	C64	23021-103
3	220	–	C96	23021-101
3	280	C96	–	23021-010
3	280	–	C96	23021-110
6	160	C96	C96	23022-002
6	160	C96	C64	23022-001
6	220	C96	C96	23022-004
6	220	C96	C64	23022-003
6	280	C96	C96	23022-010

P1 = system bus, P2 = I/O bus

Note

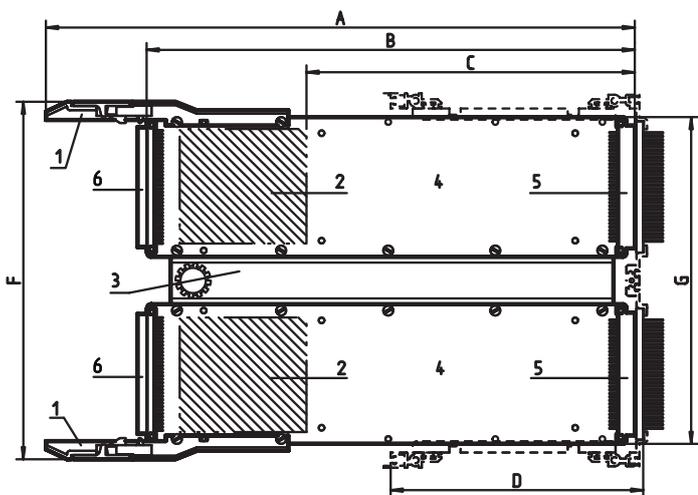
- 9 U test adaptor see page 10.28

Dimensions table VMEbus test adaptors

Board height	F (mm)	G (mm)
3 U	123.65	100
6 U	257	233.35

For board depth	A (mm)	B (mm)	C (mm)	D (mm)
160 mm	423	350	237	175.24
220 mm	483	410	297	235.24
280 mm	543	470	417	355.24

A = overall length, B = extension



Dimensional drawing of test adaptor

taa43143



ServicePLUS see page 10.31

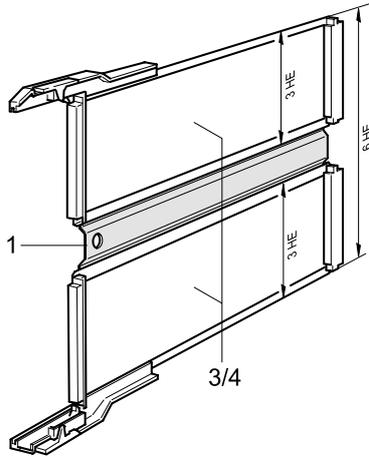


For further information www.schroff.biz/oneclick
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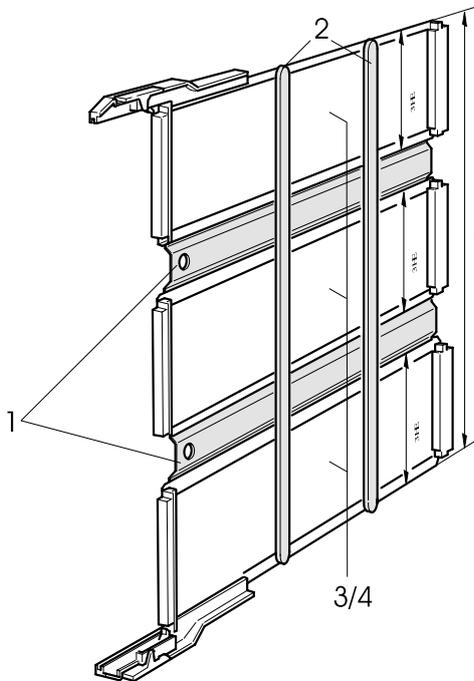
Test adaptors – accessories

6/9 U test adaptors

6 U



9 U



A4-2550

BPTE6567

■ Applicable for type B, C, D, E, F

■ 6 U test adaptor can be made from:

- 2 × equal length 3 U test adaptors (3/4)
- 1 × intermediate adaptor 6 U (1)
- or
- 1 × 3 U test adaptor (3/4)
- 1 × empty board (item 2 without connector)
- 1 × intermediate adaptor 6 U (1)

■ 9 U test adaptor can be made from:

- 3 × equal length 3 U test adaptors (3/4)
 - 1 × intermediate adaptor 9 U (1)
 - or
 - 2 × 3 U test adaptors (3/4)
 - 1 × empty board (item 2 without connector)
 - 1 × intermediate adaptor 9 U (1)
 - or other combinations
- test adaptor item 4, type x
empty board: item 3

Delivery comprises (kit)

Item	Qty		Description
	6 U	9 U	
1	1	2	Intermediate adaptor, St, 1.5 mm, grey, incl. assembly kit
2	–	2	Board stiffener

Order Information

Description	For board depth	For test adaptor	Part no.
	mm	depth (dimension B) mm	
6 U	160	290	20800-224
6 U	220	350	20800-168
6 U	280	410	20800-278
6 U	340	470	20800-279
9 U	220	350	23040-001
9 U	340	470	23040-003
Bare board (item 2) 3 U, 160 mm deep without connector, 1 piece			23040-006
Bare board (item 2) 3 U, 220 mm deep without connector, 1 piece			23040-007

Note

- Test adaptor type D cannot be combined with other types
- Test adaptor depth (dimension B) of VMEbus test adaptors see page 10.27
- Test adaptor depth (dimension B) at type B, C, D, E, F, see page 10.30



For further information www.schroff.biz/oneclick
oneClick search code = Part no.

Test adaptors – accessories

Guide rails



Top: with locking lever, left short, right long;
bottom: without locking lever, left short, right long

11192009

■ For reception and locking of modules that have to be tested (for replacement purposes only, guide rails are included in delivery of all test adaptors)

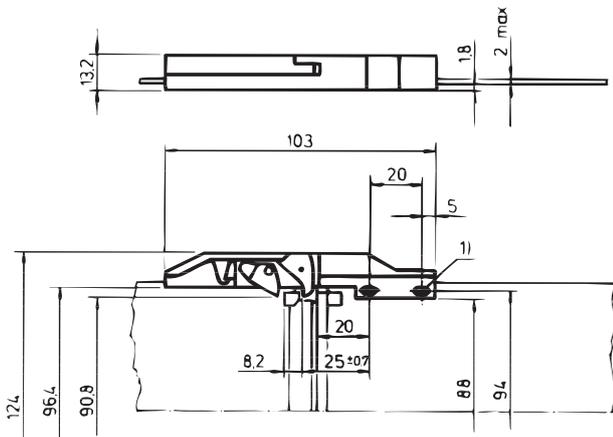
- Versions
- Short guide rail with/without locking lever
 - Long guide rail with/without locking lever

Order Information

Description	Qty/PU	Part no.
Type: short, with locking lever	2	60800-834
Type: short, without locking lever	1	60800-032
Type: long, with locking lever	2	20800-212
Type: long, without locking lever	2	20800-213

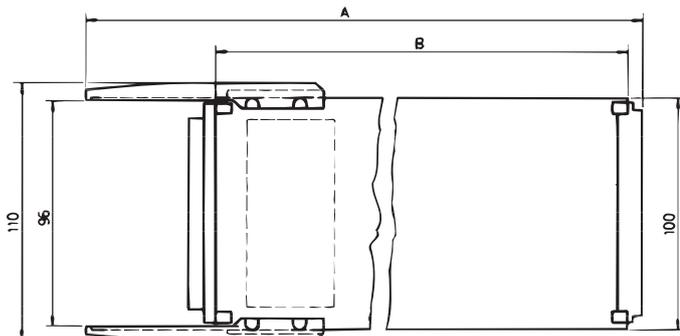


For further information www.schroff.biz/oneclick
oneClick search code = Part no.



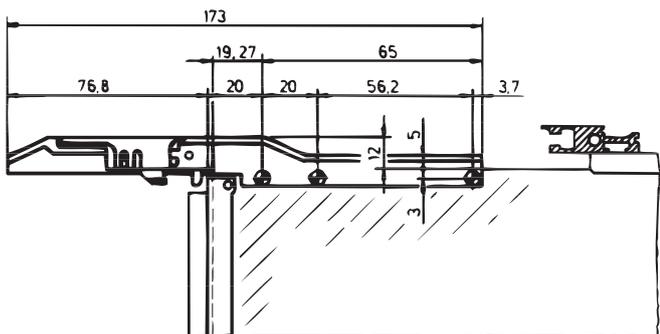
Short guide rail

A4-1908



Short guide rails without locking
A, B, see "Technical data"

A4-2411



Long guide rail without retainer

A4-2551

Test adaptors – accessories

Type/board versions

Epoxy fibreglass EP-GC02 to DIN 40802 (FR4).

Outlying connections (e.g. pins 1a, b, c and pins 32a, b, c) each have a wider PCB track or large-surface tracks on inner layers – e.g. for shielding, V_{CC} , GND.

Type

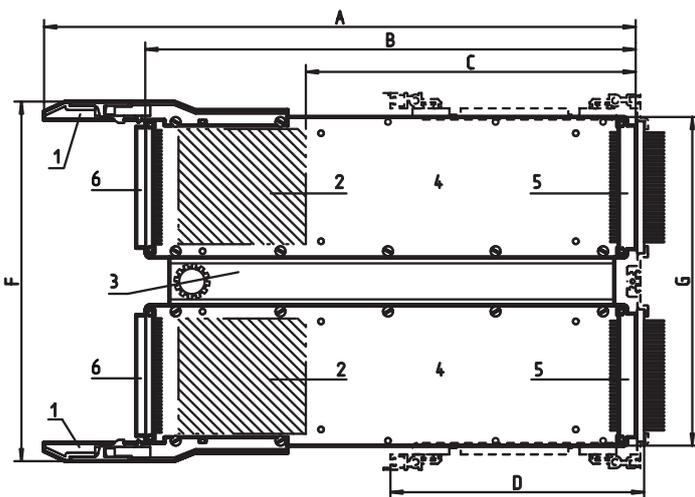
1L	PCB single-sided, laminated (suitable for up to 2 MHz)
2L	PCB, double-sided, laminated and through-connected (suitable for up to approx. 8 MHz)
4L	Multi-layer, 4-layer (suitable for above 8 MHz): Multi-layer technology with large-area inner layers (signal–surface–surface–signal). In the coax version the large-area inner layers can be soldered to the desired pins by means of power links.

Dimensions test adaptors

■ Types B, C, E, F, H and M

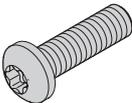
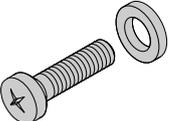
Board height	F mm	G mm
3 U	123.00	100.00
6 U	257.00	233.35

Board depth	A mm	B mm	C mm	D mm
160 mm	363	290	190	175.24
220 mm	423	350	250	235.24
280 mm	483	410	310	355.24
340 mm	543	470	370	415.24



- 1) Guide rail
- 2) Metering panel
- 3) Mounting bracket with extraction aid
- 4) Test adaptor
- 5) Male connector
- 6) Female connector

Panhead screws

Description	Application	Material	Dimension	Qty/PU	Part no.
 Torx countersunk screw	For backplane fixing	St, nickel-plated	M2.5 × 12	100	24560-161
	For backplane fixing	St, nickel-plated	M2.5 × 14	100	24560-162
	For backplane fixing	St, nickel-plated	M2.5 × 16	100	24560-163
 Screw + securing washer	For backplane fixing	St, nickel-plated	M2.5 × 12	100	21100-777

06702051

Backplanes – ServicePLUS



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