OVERVIEW

MAIN KATALOG

Cabinets 1

Wall mounted cases 2

Accessories for cabinets and wall mounted cases . . 3

Climate control . . 4

Electronics cases 5

Subracks/ 19" chassis 6

Front panels, plug-in units 7

Systems 8

Power supply units 9

Backplanes 10

Connectors, front panel component system 11

Appendix 12

12707010

EVERYTHING A SYSTEM NEEDS

Schroff's AdvancedTCA systems make the development of new, forward-looking tele-communications installations with high data-processing rates as simple for you as possible.

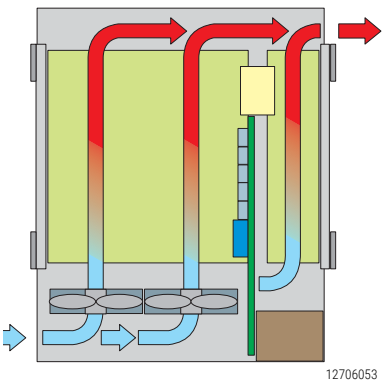
We offer everything on the basis of the AdvancedTCA specification that you have come to expect from a Schroff complete system

Excellent mechanics, optimised cooling, reliable pow8er supply, efficient data distribution and secure system management.

But that is not all:
As a matter of course, our complete systems are also available in shock and vibration-resistant versions with UL certification.

With Schroff, AdvancedTCA means matured products and wide ranges of options:

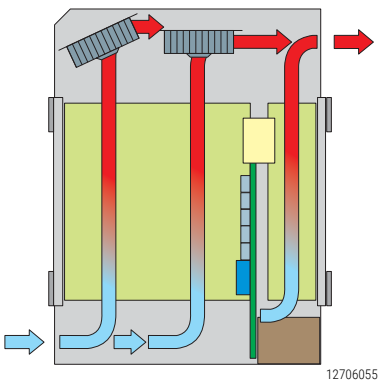
- Dimensions from 2 to 14 U
- 2 to 16 slot installations
- Cooling concepts (push, pull, push-pull)
- Backplane topologies (dual star, full mesh)
- Shelf manager based on Pigeon Point technology



12706053

PUSH COOLING

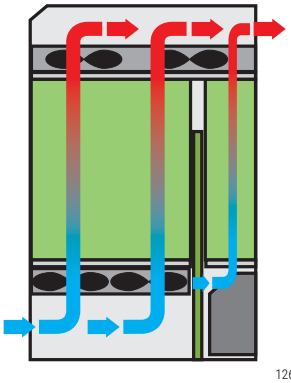
The fans are situated near the air inlet and push the air through the system.



12706055

PULL COOLING

The fans are situated near the air outlet and suck the air through the system.



12606007

PUSH-PULL

The fans are situated below and above the board cage for maximum airflow and optimal redundancy.

OVERVIEW

Overview 8.2

SYSTEMS AND COMPONENTS AVAILABLE WORLD-WIDE

- **Very wide product range with regard to dimensions, number of slots, cooling designs, backplane topologies and shelf managers; all completely assembled and tested**
- **NEBS ready, UL recognized**
- **For mounting in ETSI, 19" or 23" cabinets**
- **Cooling up to 400 W per board**

PICMG Open Modular Computing Specifications

12705006 12705005

ADVANCEDTCA SYSTEMS

- 2 ... 14 U; 2 ... 16 slot
- Backplane with dual star, full mesh topology, 15-fold connected fabric interface with hub/hub or node/node configuration; bussed or radial IPMB
- Push, pull or push-pull cooling
- Shelf manager based on Pigeon Point technology

Systems
5 U, 6 slot 8.5
13 U, 14 slot 8.5
3 U, 2 slot, 84 HP. 8.8
14 U, 14 slot, next generation 8.7
14 U, 14 slot, ECO, 84 HP 8.8

12708006 127070173

ADVANCEDTCA ACCESSORIES

- Front panels and handles
- Shelf manager based on Pigeon Point technology
- Backplane

Accessories 8.10

Field replaceable units (FRUs) 8.19

e.g. individual configuration and assembly
e.g. modifications (integration)
e.g. downloads (CAD drawings, user manuals, test reports)
e.g. custom solutions

ADVANCEDTCA 300/40 SERIES, 6 SLOT, DC

12710001

Front view

12708006

Accessories: optional shelf manager

- 40 G backplane with 6 slots, triple replicated mesh topology; 2 versions:
  - Bussed IPMB
  - Radial IPMB
- 300 W cooling capacity per slot at an ambient temperature of 55 °C
- -48 V_{DC}/ -60 V_{DC} input voltage, two redundant power entry modules (PEM)
- Two hot swap fan trays, airflow from right to left (push/pull cooling), air filter exchangeable from front
- 2 shelf managers and 1 SAP (shelf alarm panel) can be installed
- Conforms to AdvancedTCA Standard PICMG 3.0 rev.3.0
- UL recognized, E229721 type T06

DELIVERY COMPRISES (completely assembled, wired and tested)

Item	Qty	Description
1	1	Shielded 19" subrack system, St, zinc-plated, 5 U, 84 HP, 464 mm deep, front with overlays, black, RAL 9005, with 6 horizontal slots for 8 U, 6 HP, 280 mm depth AdvancedTCA boards; 6 horizontal slots at rear, 8 U, 6 HP, 70 mm deep
2	1	Backplane, 6 slot, triple replicated mesh, 2 hub slots, 4 node slots
3	2	Redundant -48 V_{DC}/-60 V_{DC} power entry module (PEM) with circuit breaker
4	2	Hot-swap fan tray with 6 fans each for cooling the boards (> 350 W/ board); Filter mat
5	2	Front panel; Space to accommodate shelf manager
6	1	Front panel; Space for fitting shelf alarm panel (SAP)

ORDER INFORMATION

AdvancedTCA system	Backplane type	Part no.
AdvancedTCA 300/40 series, 6 slot, DC	Triple replicated mesh, 40 Gbps, bussed IPMB	11596-160
	Triple replicated mesh, 40 Gbps, radial IPMB	11596-161
Accessories		
Shelf manager (bussed) 1 piece - page 8.19		**21596-300**
Shelf manager (radial) 1 piece - page 8.19		**21596-301**
Cable RJ 45 Cat 5 plug - D-Sub plug, 9-pin, length 2 m, 1 piece; page 8.19		**23204-187**
Front panels and handles		Page 8.11
AdvancedMC carriers		**Page 8.26**
Replacement parts (FRUs)		
Power entry module (PEM) - page 8.19		21990-058
Fuse 30 A/80 V for power entry module, PU 10 pieces		21191-207
Shelf alarm panel (SAP)		**21596-077**
Fan tray - page 8.20		21990-057
Air filter - page 8.22		21990-059

NOTE

- Modified systems available on request

Systems – AdvancedTCA

ADVANCEDTCA 300/40 SERIES, 14 SLOT, DC

12707005

Front view

- 40 G backplane with 14 slots, dual star topology; 2 versions:
- 300 W cooling capacity per slot at an ambient temperature of 55 °C
- -48 V_{DC}/ -60 V_{DC} input voltage, two redundant power entry modules (PEM)
- Redundant hot-swap fan trays, airflow from bottom front to top rear; air filter exchangeable from front
- Shelf alarm panel (SAP) and shelf alarm display (SAD)
- Prepared for two Schroff shelf managers with Pigeon Point ShMM 700 for bussed IPMB
- Conforms to AdvancedTCA standard PICMG 3.0 rev. 3.0
- UL recognized, E229721 type T07

DELIVERY COMPRISES (completely assembled, wired and tested)

Item	Qty	Description
1	1	Shielded 19" subrack system, St, 13 U, 84 HP, 383 mm deep; powder-coated, black, RAL 9005; front 14 slot, 8 U, vertical board mounting, boards 6 HP, 280 mm deep, rear 6 HP, 70 mm deep; cable channel at front and rear
2	1	Backplane, 14 slot
3	2	Redundant power entry module (PEM), -48 V_{DC}/-60 V_{DC}, plugged in at rear, with 4 pairs of lines each per input (8 fuses, 30 A)
4	1	Fan unit at top; 3 redundant fan trays with 400 m^3/h (230 cfm) each, with 2 fans each to cool the front and rear I/O boards; filter mat
5	1	Shelf alarm panel (SAP)
6	1	Shelf alarm display (SAD)
7	2	Mounting bracket, for assembly in 19" cabinets

ORDER INFORMATION

AdvancedTCA system	Backplane type	Part no.
AdvancedTCA 300/40 series, 14 slot, DC	Dual star, 40 Gbps, bussed IPMB	11990-600
	Dual star, 40 Gbps, bussed IPMB	11990-601
	Full mesh, 25 Gbps, radial IPMB	11990-603
Accessories		
Shelf manager (bussed) 1 piece - page 8.19		**21596-300**
Shelf manager (radial) 1 piece - page 8.19		**21596-301**
Cable RJ 45 Cat 5 plug - D-Sub plug, 9-pin, length 2 m, 1 piece; page 8.19		**23204-187**
Mounting bracket 13 U RAL 9005, from 19" to 23", PU 1 kit		21596-278
Front panels and handles		Page 8.11
AdvancedMC carriers		**Page 8.26**
Replacement parts (FRUs)		
Chassis Data Module - page 8.24		21596-023
Power entry module (PEM) - page 8.20		21596-020
Fuse 30 A/80 V for power entry module, PU 10 pieces		21191-207
Shelf alarm panel (SAP) - page 8.23		21596-140
Shelf alarm display (SAD) - page 8.24		21596-026
Fan tray - page 8.21		21990-184
Air filter - page 8.22		21596-138

NOTE

- Modified systems 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

ADVANCEDTCA 450/40 SERIES, 2 SLOT, DC, COOLING FROM FRONT TO REAR

12715001

Front view

12715002

Rear view

12715003

Power connection

- Conforms to AdvancedTCA Standard PICMG 3.0 rev. 3.0
- 40 G backplane with 2 slots, 15x connected fabric interface
- 450 W cooling capacity per slot at an ambient temperature of 55°C
- Input voltage -48 V_{DC}/-60 V_{DC}, two redundant power connections with fuse and switch
- Two hot-swap fan modules on rear of case, airflow from front to rear; air filter replaceable from front
- Prepared for one shelf alarm panel and two Schroff shelf managers with Pigeon Point ShMM 700 for bussed or radial IPMB
- FRU file to support the shelf manager with Pigeon Point ShMM 700 are available for download
- UL recognized, E229721 type T15

DELIVERY INCLUDES (completely assembled, cabled and tested)

Item	Qty	Description
1	1	Shielded 19" subrack, St, 3 U, 84 HP, 464 mm deep, powder coated, black, RAL 9005; with 2 horizontal slots at front for 8 U, 6 HP, 280 mm deep boards and 2 horizontal slots at rear, 8 U, 6 HP, 70 mm deep
2	1	Backplane, 2 slots
3	2	Redundant power connection, -48 V DC/-60 V DC, at the rear, with 1 pair of power terminals (1 fuse, 30 A) each
4	2	Redundant fan unit, rear, with 2x2 fans each
5	1	Air filter replaceable from front
6	2	Mounting bracket, for installation in 19" cabinets

ORDER INFORMATION

Cooling capacity	Airflow	Transmission rate	Voltage	Number of slots	Height U	Description	Part no.
450 W/slot	from front to rear	40 Gbps	- 48/-60 V_{DC}	2	3	15x connected fabric interface with node/node configuration, bussed IPMB	**11990-800**
450 W/slot	from front to rear	40 Gbps	- 48/-60 V_{DC}	2	3	15x connected fabric interface with hub/hub configuration, bussed IPMB	11990-801
450 W/slot	from front to rear	40 Gbps	- 48/-60 V_{DC}	2	3	15x connected fabric interface with node/node configuration, radial IPMB	11990-802
450 W/slot	from front to rear	40 Gbps	- 48/-60 V_{DC}	2	3	15x connected fabric interface with hub/hub configuration, radial IPMB	11990-803
Accessories							
Shelf manager, ACB-V, bussed 1 piece							**21596-300**
Shelf manager ACB-V, radial 1 piece							**21596-301**
Shelf manager, ACB-VI, bussed 1 piece							**21990-404**
Shelf manager ACB-VI, radial 1 piece							**21990-405**
Shelf alarm panel 1 piece							**21596-077**
Front panels and handles							**Seite 8.11**
AdvancedMC carriers							**Seite 8.26**
Replacement parts (FRUs)							
Fan tray - page 8.21							21990-526
Air filter - page 8.22							21990-527

NOTE

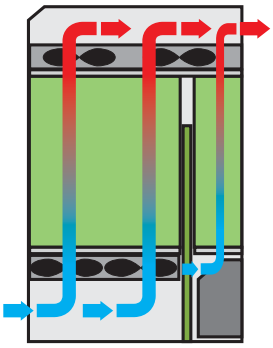
- Modified systems available on request

ADVANCEDTCA 450/40 SERIES CHASSIS, 14 SLOT, DC

12711001

Front view

12708006



12712050

Accessories: optional shelf manager Push-pull cooling

PICMG®
Open Modular Computing Specifications

- 40 G backplane with 14 slots, dual star topology, 2 versions: bussed and radial IPMB
- 450 W cooling capacity per slot at an ambient temperature of 55 °C
- -48 V_{DC}/-60 V_{DC} input voltage, two redundant power entry modules (PEM)
- 2 redundant hot-swap fan trays in push-pull configuration, airflow from bottom front to top rear; air filter exchangeable from front
- Prepared for 2 x Schroff shelf managers with Pigeon Point ShMM 700 for bussed or radial IPMB topology
- Conforms to AdvancedTCA standard PICMG 3.0 Rev.3.0
- UL recognized, E229721 type T08

DELIVERY COMPRISES (completely assembled, wired and tested)

Item	Qty	Description
1	1	Shielded 19" plug-in units, St, 14 U, 84 HP, 383 mm deep, powder coated, black, RAL 9005; with 14 vertical slots at front for 8 U, 6 HP, 280 mm deep AdvancedTCA boards; 14 vertical slots at rear, 8 U, 6 HP, 70 mm deep; cable channel on front and rear
2	1	Backplane, 14 slots
3	2	Redundant power entry module (PEM) -40 ... -72 V_{DC}, inserted at rear, with 2 pairs of lines per input
4	1	Fan tray at top with 6 fans, each 565 m^3/h (336 cfm)
5	1	Fan tray at bottom with 6 fans, each 565 m^3/h (336 cfm)
6	1	Telco alarm panel integrated in the bottom fan drawer
7	1	Air filter, can be changed from the front
8	2	Mounting bracket, for assembly in 19" cabinets

ORDER INFORMATION

AdvancedTCA system	Backplane type	Part no.
AdvancedTCA 450/40 series chassis, 14 slot, DC	Dual star, 40 Gbps, bussed IPMB	**11990-100**
	Dual star, 40 Gbps, radial IPMB	11990-101
Accessories		
Shelf manager (bussed) 1 piece - page 8.19		**21596-300**
Shelf manager (radial) 1 piece - page 8.19		**21596-301**
Cable RJ 45 Cat 5 plug - D-Sub plug, 9-pin, length 2 m, 1 piece; page 8.19		**23204-187**
Front panels and handles		**Page 8.11**
AdvancedMC carriers		**Page 8.26**
Replacement parts (FRUs)		
Chassis Data Module - page 8.24		21990-226
Power entry module (PEM) - page 8.20		21990-224
Fuse 30 A/80 V for power entry module, PU 10 pieces		21990-225
Fan tray - page 8.22		21990-227 21990-228
Air filter - page 8.22		21990-229

NOTE

- Modified systems 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

ADVANCEDTCA ECO MODULAR SYSTEM, 14 SLOTS, DC

12715004

12708006

Accessories: optional shelf manager

- Thanks to their reduced hot-swap features in the fan module, PEM, and CDM areas, Schroff ECO modular systems are optimized for cost-sensitive applications
- A sophisticated modular concept opens up the option of obtaining the ECO modular system in several versions with a range of performance classes
- 14 U, 14-slot system, airflow from bottom front to top rear, 2 slots for Schroff shelf manager ACB-VI
- Support for on-blade shelf management
- A fan module under the board cage featuring an integrated, replaceable air filter, RJ45 sockets for connecting serial interfaces of Schroff shelf managers, plus LEDs for displaying Telco alarms
- Fan control via Schroff shelf managers, on-blade shelf managers, or – in autonomous mode – a temperature sensor in the air inlet area
- Option of additional temperature sensor in air exit area
- Non-hot-swap PEM at the rear, redundant in 450 W/slot version, non-redundant in 250 W/slot version
- Shelf FRU data SEEPROMs directly on the backplane rear, UL recognized, E229721 type T16/T19

DELIVERY INCLUDES (completely assembled, cabled and tested)

Item	Qty	Description
1	1	Shielded 19" subrack, St, 14 U, 84 HP, 383 mm deep, powder-coated, black, RAL 9005, with 14 vertical slots at front for 8 U, 6 HP, 280 mm deep boards and 14 slots at rear, 8 U, 6 HP, 70 mm deep
2	1	Backplane, 14 slots
3a	1	250 W/slot: Non-redundant power connection, -48 V_{DC}/-60 V_{DC}, at the rear, with 1 pair of power terminals (2 fuses, 50 A each)
3b	1	450 W/slot: Redundant power connection, -48 V_{DC}/-60 V_{DC}, at the rear, with 4 pairs of power terminals (8 fuses, 50 A each)
4	1	Fan unit with 8 fans, exchangeable air filter, Telco alarm display, and interfaces for shelf managers
5	2	Mounting bracket, for installation in 19" cabinets

PICMG®
Open Modular Computing Specifications

ORDER INFORMATION

Cooling capacity	Power	Airflow	Transmission rate	Voltage	Number of slots	Height U	Backplane type	Part no.
250 W/slot	250 W/slot, non-redundant	from front to rear	40 Gbps	-48/-60 V_{DC}	14	14	Dual star, bussed IPMB	**11990-900**
450 W/slot	450 W/slot, redundant	from front to rear	40 Gbps	-48/-60 V_{DC}	14	14	Dual-dual star, bussed IPMB	**11990-903**
Accessories								
Shelf manager, ACB-VI, bussed 1 piece								**21990-404**

NOTE

- Modified systems available on request

ADVANCEDTCA 450/40 FC SERIES, 14 SLOT, DC

12718001

Picture shows 11990-190

12708006

Accessories: optional shelf manager

PICMG
Open Modular Computing Specifications

- 40 G backplane with 14 slots, dual star topology, bussed IPMB
- 450 W cooling capacity per slot at an ambient temperature of 55 °C
- -48 V_{DC}/-60 V_{DC} input voltage, two redundant power entry modules (PEM)
- 2 redundant hot-swap fan trays in push-pull configuration
- Prepared for 2 x Schroff shelf managers with Pigeon Point ShMM 700 for bussed IPMI topology
- Shelf Manager slots on the right hand side in the ATCA card cage
- Shelf Manager consoles and Telco alarm interface in lower fan tray
- Rear I/O on all slots
- Air filter exchangeable from front
- Air flow either from bottom to top or from front to rear

DELIVERY INCLUDES (completely assembled, cabled and tested)

Item	Qty	Description
1	1	Shielded 19" plug-in units, St, 14 U, 84 HP, 383 mm deep, powder coated, black, RAL 9005; with 14 vertical slots at front for 8 U, 6 HP, 280 mm deep AdvancedTCA boards; 14 vertical slots at rear, 8 U, 6 HP, 70 mm deep; cable channel on front and rear
2	1	Backplane, 14 slots
3	2	Redundant power entry module (PEM) -40 ... -72 V_{DC}, inserted at rear, with 2 pairs of lines per input
4	1	Fan tray at top with 6 fans, each 565 m^3/h (336 cfm)
5	1	Fan tray at bottom with 6 fans, each 565 m^3/h (336 cfm)
6	1	Telco alarm panel integrated in the bottom fan drawer
7	1	Air filter, can be changed from the front
8	2	Mounting bracket, for assembly in 19" cabinets

ORDER INFORMATION

Airflow	Depth mm	Number of slots	Backplane type	Transmission rate	Cooling capacity	Voltage	Height U	Width HP	Part no.
From buttom to top	383	14	Dual star, 40 Gbps, bussed IPMB	40 Gbps	450 W / slot	- 48/-60 V_{DC}	14	84	**11990-190**
From front to rear	383	14	Dual star, 40 Gbps, bussed IPMB	40 Gbps	450 W / slot	- 48/-60 V_{DC}	14	84	**11990-192**
Accessories									
Shelf manager, ACB-VI, bussed 1 piece									**21990-404**
AdvancedTCA air deflector Front panel, 8 U, 6 HP, stainless steel, for rear I/O section incl. air baffle (65 mm deep) with mesh gasketing, 1 piece									**21591-099**
AdvancedTCA air deflector Front panel, 8 U, 6 HP, stainless steel, incl. air baffle (280 mm deep) with mesh gasketing, 1 piece									**21591-079**
AdvancedTCA air deflector Front panel, 8 U, 6 HP, Al extrusion, incl. air baffle (280 mm deep) with mesh gasketing, 1 piece									**21596-008**
AdvancedTCA air deflector Front panel, 8 U, 6 HP, Al profile for rear I/O section incl. air baffle (65 mm deep) with mesh gasketing, 1 piece									**21591-107**
Front panel, stainless steel to cover an unused shelf manager slot, width 15.22 mm, height 99.33 mm, incl. EMC gasket, 1 piece									21596-012
Cable for the serial console of the shelf manager via the SAP RJ 45 Cat 5 plug - D-Sub plug, 9-pin, length 2 m, 1 piece									**23204-187**

NOTE

- Modified systems available on request

Part number in bold face type: ready for shipping within 2 working days
Part number in normal type: ready for shipping within 10 working days

ACCESSORIES OVERVIEW

- Front panel **reinforced** with die-cast end piece and IEA handle **with** spring loading, see from page 8.11
  - Kit
  - Individual configuration
- Front panel and IEA handle **without** spring loading, see from page 8.13
  - Kit
  - Individual configuration (Al or stainless steel) with/without spring loading
- AdvancedTCA front panels with integrated side two cover, see page 8.15
- AdvancedTCA air deflectors, filler panels, see page 8.16
- Shelf managers, see page 8.19
- Backplanes, see page 8.18
- Replacement parts - field replacement units (FRUs), see from page 8.19

OVERVIEW

MAIN KATALOG

Cabinets 1

Wall mounted cases 2

Accessories for cabinets and wall mounted cases . . 3

Climate control . . 4

Electronics cases 5

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Connectors, front panel component system 11

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12707010

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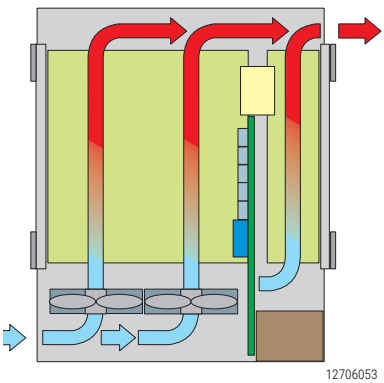
- 2 to 16 slot installations
- Cooling concepts (push, pull, push-pull)
- Backplane topologies (dual star, full mesh)
- Shelf manager based on Pigeon Point technology



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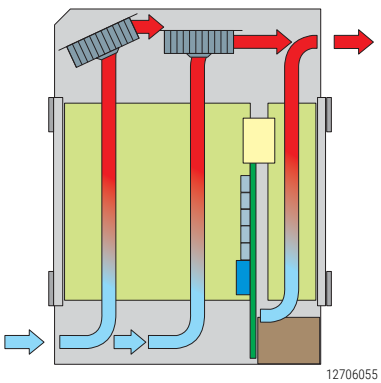
PUSH COOLING

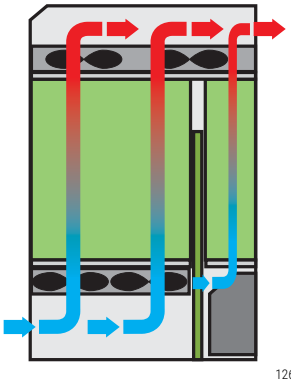
The fans are situated near the air inlet and push the air through the system.



12706055

PULL COOLING

The fans are situated near the air outlet and suck the air through the system.



12606007

PUSH-PULL

The fans are situated below and above the board cage for maximum airflow and optimal redundancy.

OVERVIEW

Overview 8.2

SYSTEMS AND COMPONENTS AVAILABLE WORLD-WIDE

- **Very wide product range with regard to dimensions, number of slots, cooling designs, backplane topologies and shelf managers; all completely assembled and tested**
- **NEBS ready, UL recognized**
- **For mounting in ETSI, 19" or 23" cabinets**
- **Cooling up to 400 W per board**

PICMG Open Modular Computing Specifications

12705006 12705005

ADVANCEDTCA SYSTEMS

- 2 ... 14 U; 2 ... 16 slot
- Backplane with dual star, full mesh topology, 15-fold connected fabric interface with hub/hub or node/node configuration; bussed or radial IPMB
- Push, pull or push-pull cooling
- Shelf manager based on Pigeon Point technology

Systems
5 U, 6 slot 8.5
13 U, 14 slot 8.5
3 U, 2 slot, 84 HP. 8.8
14 U, 14 slot, next generation 8.7
14 U, 14 slot, ECO, 84 HP 8.8

12708006 127070173

ADVANCEDTCA ACCESSORIES

- Front panels and handles
- Shelf manager based on Pigeon Point technology
- Backplane

Accessories 8.10

Field replaceable units (FRUs) 8.19

e.g. individual configuration and assembly
e.g. modifications (integration)
e.g. downloads (CAD drawings, user manuals, test reports)
e.g. custom solutions

ADVANCEDTCA 300/40 SERIES, 6 SLOT, DC

12710001

Front view

12708006

Accessories: optional shelf manager

- 40 G backplane with 6 slots, triple replicated mesh topology; 2 versions:
  - Bussed IPMB
  - Radial IPMB
- 300 W cooling capacity per slot at an ambient temperature of 55 °C
- -48 V_{DC}/ -60 V_{DC} input voltage, two redundant power entry modules (PEM)
- Two hot swap fan trays, airflow from right to left (push/pull cooling), air filter exchangeable from front
- 2 shelf managers and 1 SAP (shelf alarm panel) can be installed
- Conforms to AdvancedTCA Standard PICMG 3.0 rev.3.0
- UL recognized, E229721 type T06

DELIVERY COMPRISES (completely assembled, wired and tested)

Item	Qty	Description
1	1	Shielded 19" subrack system, St, zinc-plated, 5 U, 84 HP, 464 mm deep, front with overlays, black, RAL 9005, with 6 horizontal slots for 8 U, 6 HP, 280 mm depth AdvancedTCA boards; 6 horizontal slots at rear, 8 U, 6 HP, 70 mm deep
2	1	Backplane, 6 slot, triple replicated mesh, 2 hub slots, 4 node slots
3	2	Redundant -48 V_{DC}/-60 V_{DC} power entry module (PEM) with circuit breaker
4	2	Hot-swap fan tray with 6 fans each for cooling the boards (> 350 W/ board); Filter mat
5	2	Front panel; Space to accommodate shelf manager
6	1	Front panel; Space for fitting shelf alarm panel (SAP)

ORDER INFORMATION

AdvancedTCA system	Backplane type	Part no.
AdvancedTCA 300/40 series, 6 slot, DC	Triple replicated mesh, 40 Gbps, bussed IPMB	11596-160
	Triple replicated mesh, 40 Gbps, radial IPMB	11596-161
Accessories		
Shelf manager (bussed) 1 piece - page 8.19		**21596-300**
Shelf manager (radial) 1 piece - page 8.19		**21596-301**
Cable RJ 45 Cat 5 plug - D-Sub plug, 9-pin, length 2 m, 1 piece; page 8.19		**23204-187**
Front panels and handles		Page 8.11
AdvancedMC carriers		**Page 8.26**
Replacement parts (FRUs)		
Power entry module (PEM) - page 8.19		21990-058
Fuse 30 A/80 V for power entry module, PU 10 pieces		21191-207
Shelf alarm panel (SAP)		**21596-077**
Fan tray - page 8.20		21990-057
Air filter - page 8.22		21990-059

NOTE

- Modified systems available on request

Systems – AdvancedTCA

ADVANCEDTCA 300/40 SERIES, 14 SLOT, DC

12707005

Front view

- 40 G backplane with 14 slots, dual star topology; 2 versions:
- 300 W cooling capacity per slot at an ambient temperature of 55 °C
- -48 V_{DC}/ -60 V_{DC} input voltage, two redundant power entry modules (PEM)
- Redundant hot-swap fan trays, airflow from bottom front to top rear; air filter exchangeable from front
- Shelf alarm panel (SAP) and shelf alarm display (SAD)
- Prepared for two Schroff shelf managers with Pigeon Point ShMM 700 for bussed IPMB
- Conforms to AdvancedTCA standard PICMG 3.0 rev. 3.0
- UL recognized, E229721 type T07

DELIVERY COMPRISES (completely assembled, wired and tested)

Item	Qty	Description
1	1	Shielded 19" subrack system, St, 13 U, 84 HP, 383 mm deep; powder-coated, black, RAL 9005; front 14 slot, 8 U, vertical board mounting, boards 6 HP, 280 mm deep, rear 6 HP, 70 mm deep; cable channel at front and rear
2	1	Backplane, 14 slot
3	2	Redundant power entry module (PEM), -48 V_{DC}/-60 V_{DC}, plugged in at rear, with 4 pairs of lines each per input (8 fuses, 30 A)
4	1	Fan unit at top; 3 redundant fan trays with 400 m^3/h (230 cfm) each, with 2 fans each to cool the front and rear I/O boards; filter mat
5	1	Shelf alarm panel (SAP)
6	1	Shelf alarm display (SAD)
7	2	Mounting bracket, for assembly in 19" cabinets

ORDER INFORMATION

AdvancedTCA system	Backplane type	Part no.
AdvancedTCA 300/40 series, 14 slot, DC	Dual star, 40 Gbps, bussed IPMB	11990-600
	Dual star, 40 Gbps, bussed IPMB	11990-601
	Full mesh, 25 Gbps, radial IPMB	11990-603
Accessories		
Shelf manager (bussed) 1 piece - page 8.19		**21596-300**
Shelf manager (radial) 1 piece - page 8.19		**21596-301**
Cable RJ 45 Cat 5 plug - D-Sub plug, 9-pin, length 2 m, 1 piece; page 8.19		**23204-187**
Mounting bracket 13 U RAL 9005, from 19" to 23", PU 1 kit		21596-278
Front panels and handles		Page 8.11
AdvancedMC carriers		**Page 8.26**
Replacement parts (FRUs)		
Chassis Data Module - page 8.24		21596-023
Power entry module (PEM) - page 8.20		21596-020
Fuse 30 A/80 V for power entry module, PU 10 pieces		21191-207
Shelf alarm panel (SAP) - page 8.23		21596-140
Shelf alarm display (SAD) - page 8.24		21596-026
Fan tray - page 8.21		21990-184
Air filter - page 8.22		21596-138

NOTE

- Modified systems 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

ADVANCEDTCA 450/40 SERIES, 2 SLOT, DC, COOLING FROM FRONT TO REAR

12715001

Front view

12715002

Rear view

12715003

Power connection

- Conforms to AdvancedTCA Standard PICMG 3.0 rev. 3.0
- 40 G backplane with 2 slots, 15x connected fabric interface
- 450 W cooling capacity per slot at an ambient temperature of 55°C
- Input voltage -48 V_{DC}/-60 V_{DC}, two redundant power connections with fuse and switch
- Two hot-swap fan modules on rear of case, airflow from front to rear; air filter replaceable from front
- Prepared for one shelf alarm panel and two Schroff shelf managers with Pigeon Point ShMM 700 for bussed or radial IPMB
- FRU file to support the shelf manager with Pigeon Point ShMM 700 are available for download
- UL recognized, E229721 type T15

DELIVERY INCLUDES (completely assembled, cabled and tested)

Item	Qty	Description
1	1	Shielded 19" subrack, St, 3 U, 84 HP, 464 mm deep, powder coated, black, RAL 9005; with 2 horizontal slots at front for 8 U, 6 HP, 280 mm deep boards and 2 horizontal slots at rear, 8 U, 6 HP, 70 mm deep
2	1	Backplane, 2 slots
3	2	Redundant power connection, -48 V DC/-60 V DC, at the rear, with 1 pair of power terminals (1 fuse, 30 A) each
4	2	Redundant fan unit, rear, with 2x2 fans each
5	1	Air filter replaceable from front
6	2	Mounting bracket, for installation in 19" cabinets

ORDER INFORMATION

Cooling capacity	Airflow	Transmission rate	Voltage	Number of slots	Height U	Description	Part no.
450 W/slot	from front to rear	40 Gbps	- 48/-60 V_{DC}	2	3	15x connected fabric interface with node/node configuration, bussed IPMB	**11990-800**
450 W/slot	from front to rear	40 Gbps	- 48/-60 V_{DC}	2	3	15x connected fabric interface with hub/hub configuration, bussed IPMB	11990-801
450 W/slot	from front to rear	40 Gbps	- 48/-60 V_{DC}	2	3	15x connected fabric interface with node/node configuration, radial IPMB	11990-802
450 W/slot	from front to rear	40 Gbps	- 48/-60 V_{DC}	2	3	15x connected fabric interface with hub/hub configuration, radial IPMB	11990-803
Accessories							
Shelf manager, ACB-V, bussed 1 piece							**21596-300**
Shelf manager ACB-V, radial 1 piece							**21596-301**
Shelf manager, ACB-VI, bussed 1 piece							**21990-404**
Shelf manager ACB-VI, radial 1 piece							**21990-405**
Shelf alarm panel 1 piece							**21596-077**
Front panels and handles							**Seite 8.11**
AdvancedMC carriers							**Seite 8.26**
Replacement parts (FRUs)							
Fan tray - page 8.21							21990-526
Air filter - page 8.22							21990-527

NOTE

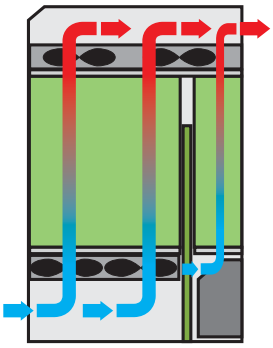
- Modified systems available on request

ADVANCEDTCA 450/40 SERIES CHASSIS, 14 SLOT, DC

12711001

Front view

12708006



12712050

Accessories: optional shelf manager Push-pull cooling

PICMG®
Open Modular Computing Specifications

- 40 G backplane with 14 slots, dual star topology, 2 versions: bussed and radial IPMB
- 450 W cooling capacity per slot at an ambient temperature of 55 °C
- -48 V_{DC}/-60 V_{DC} input voltage, two redundant power entry modules (PEM)
- 2 redundant hot-swap fan trays in push-pull configuration, airflow from bottom front to top rear; air filter exchangeable from front
- Prepared for 2 x Schroff shelf managers with Pigeon Point ShMM 700 for bussed or radial IPMB topology
- Conforms to AdvancedTCA standard PICMG 3.0 Rev.3.0
- UL recognized, E229721 type T08

DELIVERY COMPRISES (completely assembled, wired and tested)

Item	Qty	Description
1	1	Shielded 19" plug-in units, St, 14 U, 84 HP, 383 mm deep, powder coated, black, RAL 9005; with 14 vertical slots at front for 8 U, 6 HP, 280 mm deep AdvancedTCA boards; 14 vertical slots at rear, 8 U, 6 HP, 70 mm deep; cable channel on front and rear
2	1	Backplane, 14 slots
3	2	Redundant power entry module (PEM) -40 ... -72 V_{DC}, inserted at rear, with 2 pairs of lines per input
4	1	Fan tray at top with 6 fans, each 565 m^3/h (336 cfm)
5	1	Fan tray at bottom with 6 fans, each 565 m^3/h (336 cfm)
6	1	Telco alarm panel integrated in the bottom fan drawer
7	1	Air filter, can be changed from the front
8	2	Mounting bracket, for assembly in 19" cabinets

ORDER INFORMATION

AdvancedTCA system	Backplane type	Part no.
AdvancedTCA 450/40 series chassis, 14 slot, DC	Dual star, 40 Gbps, bussed IPMB	**11990-100**
	Dual star, 40 Gbps, radial IPMB	11990-101
Accessories		
Shelf manager (bussed) 1 piece - page 8.19		**21596-300**
Shelf manager (radial) 1 piece - page 8.19		**21596-301**
Cable RJ 45 Cat 5 plug - D-Sub plug, 9-pin, length 2 m, 1 piece; page 8.19		**23204-187**
Front panels and handles		**Page 8.11**
AdvancedMC carriers		**Page 8.26**
Replacement parts (FRUs)		
Chassis Data Module - page 8.24		21990-226
Power entry module (PEM) - page 8.20		21990-224
Fuse 30 A/80 V for power entry module, PU 10 pieces		21990-225
Fan tray - page 8.22		21990-227 21990-228
Air filter - page 8.22		21990-229

NOTE

- Modified systems 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

ADVANCEDTCA ECO MODULAR SYSTEM, 14 SLOTS, DC

12715004

12708006

Accessories: optional shelf manager

- Thanks to their reduced hot-swap features in the fan module, PEM, and CDM areas, Schroff ECO modular systems are optimized for cost-sensitive applications
- A sophisticated modular concept opens up the option of obtaining the ECO modular system in several versions with a range of performance classes
- 14 U, 14-slot system, airflow from bottom front to top rear, 2 slots for Schroff shelf manager ACB-VI
- Support for on-blade shelf management
- A fan module under the board cage featuring an integrated, replaceable air filter, RJ45 sockets for connecting serial interfaces of Schroff shelf managers, plus LEDs for displaying Telco alarms
- Fan control via Schroff shelf managers, on-blade shelf managers, or – in autonomous mode – a temperature sensor in the air inlet area
- Option of additional temperature sensor in air exit area
- Non-hot-swap PEM at the rear, redundant in 450 W/slot version, non-redundant in 250 W/slot version
- Shelf FRU data SEEPROMs directly on the backplane rear, UL recognized, E229721 type T16/T19

DELIVERY INCLUDES (completely assembled, cabled and tested)

Item	Qty	Description
1	1	Shielded 19" subrack, St, 14 U, 84 HP, 383 mm deep, powder-coated, black, RAL 9005, with 14 vertical slots at front for 8 U, 6 HP, 280 mm deep boards and 14 slots at rear, 8 U, 6 HP, 70 mm deep
2	1	Backplane, 14 slots
3a	1	250 W/slot: Non-redundant power connection, -48 V_{DC}/-60 V_{DC}, at the rear, with 1 pair of power terminals (2 fuses, 50 A each)
3b	1	450 W/slot: Redundant power connection, -48 V_{DC}/-60 V_{DC}, at the rear, with 4 pairs of power terminals (8 fuses, 50 A each)
4	1	Fan unit with 8 fans, exchangeable air filter, Telco alarm display, and interfaces for shelf managers
5	2	Mounting bracket, for installation in 19" cabinets

PICMG®
Open Modular Computing Specifications

ORDER INFORMATION

Cooling capacity	Power	Airflow	Transmission rate	Voltage	Number of slots	Height U	Backplane type	Part no.
250 W/slot	250 W/slot, non-redundant	from front to rear	40 Gbps	-48/-60 V_{DC}	14	14	Dual star, bussed IPMB	**11990-900**
450 W/slot	450 W/slot, redundant	from front to rear	40 Gbps	-48/-60 V_{DC}	14	14	Dual-dual star, bussed IPMB	**11990-903**
Accessories								
Shelf manager, ACB-VI, bussed 1 piece								**21990-404**

NOTE

- Modified systems available on request

ADVANCEDTCA 450/40 FC SERIES, 14 SLOT, DC

12718001

Picture shows 11990-190

12708006

Accessories: optional shelf manager

PICMG
Open Modular Computing Specifications

- 40 G backplane with 14 slots, dual star topology, bussed IPMB
- 450 W cooling capacity per slot at an ambient temperature of 55 °C
- -48 V_{DC}/-60 V_{DC} input voltage, two redundant power entry modules (PEM)
- 2 redundant hot-swap fan trays in push-pull configuration
- Prepared for 2 x Schroff shelf managers with Pigeon Point ShMM 700 for bussed IPMI topology
- Shelf Manager slots on the right hand side in the ATCA card cage
- Shelf Manager consoles and Telco alarm interface in lower fan tray
- Rear I/O on all slots
- Air filter exchangeable from front
- Air flow either from bottom to top or from front to rear

DELIVERY INCLUDES (completely assembled, cabled and tested)

Item	Qty	Description
1	1	Shielded 19" plug-in units, St, 14 U, 84 HP, 383 mm deep, powder coated, black, RAL 9005; with 14 vertical slots at front for 8 U, 6 HP, 280 mm deep AdvancedTCA boards; 14 vertical slots at rear, 8 U, 6 HP, 70 mm deep; cable channel on front and rear
2	1	Backplane, 14 slots
3	2	Redundant power entry module (PEM) -40 ... -72 V_{DC}, inserted at rear, with 2 pairs of lines per input
4	1	Fan tray at top with 6 fans, each 565 m^3/h (336 cfm)
5	1	Fan tray at bottom with 6 fans, each 565 m^3/h (336 cfm)
6	1	Telco alarm panel integrated in the bottom fan drawer
7	1	Air filter, can be changed from the front
8	2	Mounting bracket, for assembly in 19" cabinets

ORDER INFORMATION

Airflow	Depth mm	Number of slots	Backplane type	Transmission rate	Cooling capacity	Voltage	Height U	Width HP	Part no.
From buttom to top	383	14	Dual star, 40 Gbps, bussed IPMB	40 Gbps	450 W / slot	- 48/-60 V_{DC}	14	84	**11990-190**
From front to rear	383	14	Dual star, 40 Gbps, bussed IPMB	40 Gbps	450 W / slot	- 48/-60 V_{DC}	14	84	**11990-192**
Accessories									
Shelf manager, ACB-VI, bussed 1 piece									**21990-404**
AdvancedTCA air deflector Front panel, 8 U, 6 HP, stainless steel, for rear I/O section incl. air baffle (65 mm deep) with mesh gasketing, 1 piece									**21591-099**
AdvancedTCA air deflector Front panel, 8 U, 6 HP, stainless steel, incl. air baffle (280 mm deep) with mesh gasketing, 1 piece									**21591-079**
AdvancedTCA air deflector Front panel, 8 U, 6 HP, Al extrusion, incl. air baffle (280 mm deep) with mesh gasketing, 1 piece									**21596-008**
AdvancedTCA air deflector Front panel, 8 U, 6 HP, Al profile for rear I/O section incl. air baffle (65 mm deep) with mesh gasketing, 1 piece									**21591-107**
Front panel, stainless steel to cover an unused shelf manager slot, width 15.22 mm, height 99.33 mm, incl. EMC gasket, 1 piece									21596-012
Cable for the serial console of the shelf manager via the SAP RJ 45 Cat 5 plug - D-Sub plug, 9-pin, length 2 m, 1 piece									**23204-187**

NOTE

- Modified systems available on request

Part number in bold face type: ready for shipping within 2 working days
Part number in normal type: ready for shipping within 10 working days

ACCESSORIES OVERVIEW

- Front panel **reinforced** with die-cast end piece and IEA handle **with** spring loading, see from page 8.11
  - Kit
  - Individual configuration
- Front panel and IEA handle **without** spring loading, see from page 8.13
  - Kit
  - Individual configuration (Al or stainless steel) with/without spring loading
- AdvancedTCA front panels with integrated side two cover, see page 8.15
- AdvancedTCA air deflectors, filler panels, see page 8.16
- Shelf managers, see page 8.19
- Backplanes, see page 8.18
- Replacement parts - field replacement units (FRUs), see from page 8.19