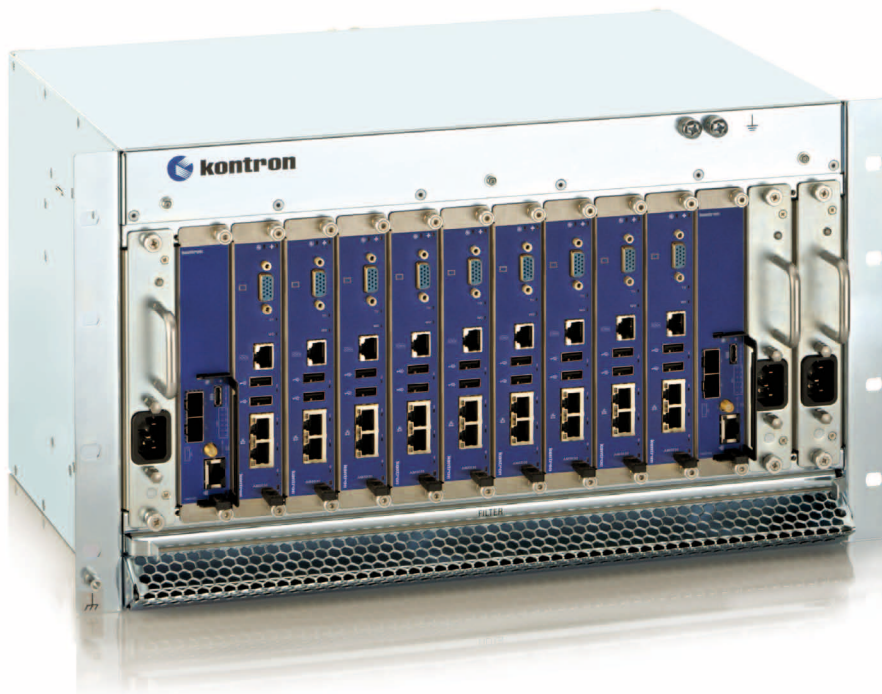# » OM6090D - OM7090D «

Key Features

» Modular platform for high-end multi-core processor AMCs

» 19" rack mountable system (6U) with front-to-back cooling for best usage of shelf space

» Supports Double-Width, Full-Size AMCs for high power envelope up to 80W

» 10 GbE fabric with enterprise-class MCH

» Fault resilience and high-availability, supports redundant configurations

OM6090D - OM7090D
Product Overview

The OM6090D / OM7090D is a modular system for High-End Processors and Switches beyond 1Gbit/s and positions MicroTCA at 10 Gbits/s and allows to accommodate state-of-the-art multi-core CPUs such as the Intel® Quad-Core XEON® on Kontron's AM5030, as well as Kontron's 10Gbit switch AM4910. The system supports the 4U MicroTCA form factor (double-width AMCs) with 80 Watts per AMC.
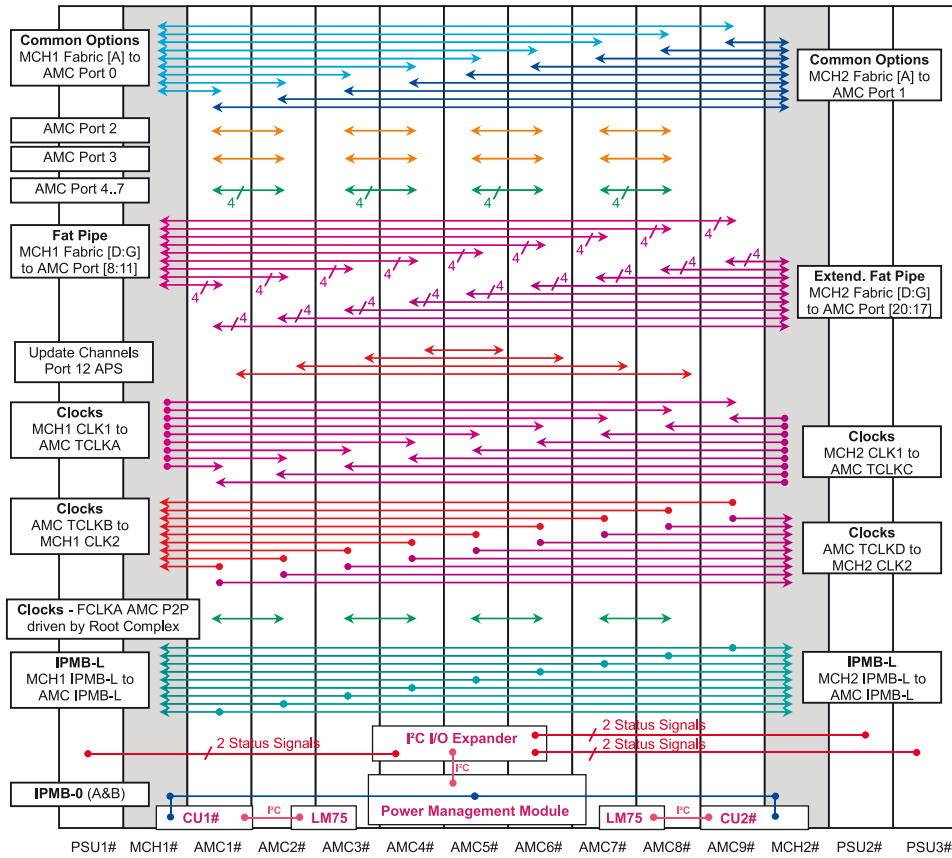
Systems Configuration

» Two versions: OM6090D and OM7090D
   Basic configuration: chassis incl. power & fans and MicroTCA management

» OM6090D: 3x Slots for PSUs, 2 + 1 PSU configuration for load sharing, power switching according MicroTCA.0 on the backplane
» OM7090D: 3x Slots for PMs, 2x PMs, plus extra PMs for redundant power

» 9x Full-Size, Double-Width Slots for AMCs (max 80W) (e.g. AM5030)
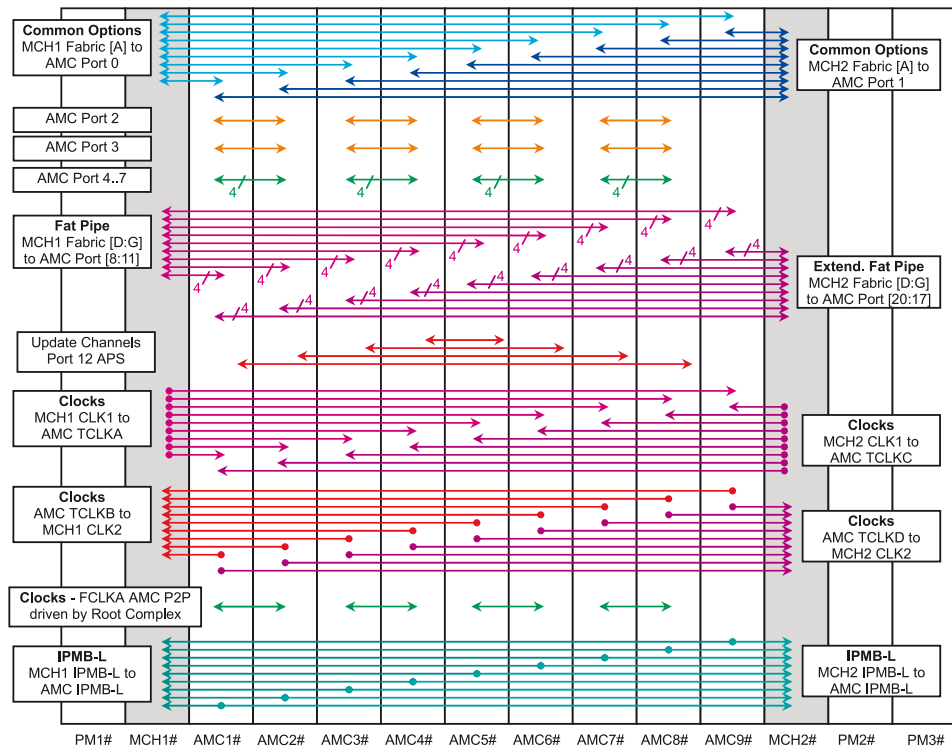» 2x Slots for MCHs, redundant configuration (e.g.AM4910)

Applications

Designed for compute-intensive applications the modular MicroTCA platform is dedicated for applications in the 3GSM, military, defense, transportation and avionics market segments. Typical applications are Radar and Sonar (MAG segment) applications as well as Carrier-grade telecommunications and Radio Network Controllers (Communications Segment) which benefit from the processing power of a high-performance AMC module like the AM5030 and high-speed fabric of 10GbE on the backplane.

OM6090D Backplane Topology

OM7090D Backplane Topology

Technical Information

Physical Dimensions

Form Factor	6U 19" chassis, 266 mm x 428 mm x 365 mm (H x W x D)

Backplane architecture

Slots	Backplane for 14 Full-size Double-width Modules
	Slot 2, 12 MCHs Slot 3 - 11 AMCs
	OM6090D: Slot 1, 13, 14 PSUs
	OM7090D: Slot 1, 13, 14 PMs
System interconnect	AMC port 0, 1: GbE dual star topology AMC port 2, 3: SATA as point- to-point interconnect between adjacent slots AMC port 4 – 7: PCIe x 4 as point- to-point interconnect between adjacent slots AMC port 8 – 11, 17 - 20: 10 GbE dual star topology
IPMI	Radial IPMI-L from both MCH slots to all AMC slots Bused IPMB-0 among MCHs and CUs.
Power	OM6090D: 3 slots for 3x 600W AC PSUs OM7090D: 3 slots for 3x 600W AC PMs
Cooling	Active cooling through two hot-swappable Fan Trays providing each: » 2 temperature controlled 12 VDC fans » Cooling Unit Enhanced Module Management Controller (CU EMMC) » Display Module

Environmental & Regulatory

Temperature range	-5°C to +55°C (standard, depending on processor version and airflow in the system) -40°C to +70°C (storage)
Shock & Vibration	According MicroTCA.1 » XR1 (DL3) » XR2 (VITA 47 V2)
Noise	According MicroTCA.1 for Telco Equipment » ETSI EN700 753 » GR-63-CORE R 4-96
Safety	IEC60950-1
EMC	EN55022 (CISPR22)
Climatic Humidity	IEC60068-2-78
WEEE	Directive 2002/96/EC
RoHS	Directive 2002/95/EC

Ordering Information

Chassis

OM6090D-6U-R (AM4910)	6U mTCA System, for 9x DW Full-size AMCs, 2x MCHs, 3x PSUs, 1x PSU 600W and 1x MCH AM4910 included
OM7090D-6U-R (AM4910)	6U mTCA System, for 9x DW Full-size AMCs, 2x MCHs, 3x PMs, 1x PM 600W and 1x MCH AM4910 included

Accessories

OM-PSU-600W	600W Plug-in AC Power Supply for OM6090D
OM-PM-600W	600W Plug-in AC Power Module for OM7090D
AM4910	2nd MCH with managed 1 and 10 GbE Layer 2 Ethernet Switching for redundancy

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