

PHYTEC

phyGATE[®]-Tauri Family

Flexible and scalable gateway solutions in DIN rail housing

The phyGATE-Tauri-S,-L and -M gateways are ideal for new Industry 4.0 and Retro Fit solutions. They are ready for smart data analysis and efficient controlling of your machines.

Choose between systems with the high computing power of the i.MX 8M Mini (4x Arm[®] Cortex[®]-A53), the powerful but less expensive i.MX 93 (2x Cortex[®]-A55) or the low-budget solution with i.MX 6ULL (Cortex[®]-A7). Compatible expansion cards are available for all variants. Thanks to our standardized design, you can meet different performance requirements and convince your markets with tailor-made, cost-optimized offers. You can either design individual interface cards yourself or have them developed quickly and cost-effectively via our design service.



Highlights

- Series-ready gateway for implementing your own application software
- OEM modifiable in terms of branding and delivery condition
- Expandable via DIN-rail foot contact (phyRAIL) and housing-internal expansion connector
- Galv. separated interfaces (RS-232, RS-485, CAN)
- miniPCIe slot option for radio modules (BT / WLAN / LTE) and SSD storage
- Prepared for security and update and device management

Your advantages

- Price/performance optimization through three selectable systems: i.MX 6ULL, i.MX 93 or i.MX 8M Mini
- Individual expansion for your interface needs through standardized backplane bus
- Space-saving solution through on-board expansion
- Individual interface extensions at low costs
- Easy integration of your systems into cloud solutions through existing sample implementations
- Security for your customers through Secure Boot, Secure root file system and certificate management
- Long-term solution right from the start through current Linux/Yocto versions with long-term maintenance
- Update service for your customers through device management solutions from PHYTEC
- Future-proof through long-term maintenance and expansion
- Supplementary hardware and software solutions from our partners (LoRaWAN, data visualization, security, etc.)



Module Configuration | phyGATE-Tauri-S | phyGATE-Tauri-M | phyGATE-Tauri-L

Module	phyCORE-i.MX 6ULL	phyCORE-i.MX 93	phyCORE-i.MX 8M Mini
Processor	NXP i.MX 6ULL	NXP i.MX 93	NXP i.MX 8M Mini
Core / Coprocessor	Arm® Cortex®-A7	2x Arm® Cortex®-A55 / Cortex®-M33	4x Arm® Cortex®-A53 / Cortex®-M4
Clock frequency	528 MHz - 900 MHz	up to 1.7 GHz (A55), up to 250 MHz (M33)	up to 1.8 GHz (A53), 400 MHz (M4)
AI/ML	–	Arm® Ethos™-U65 microNPU	–
Security	TPM Chip	TPM Chip	TPM Chip
MEMORY			
eMMC	8 GB (opt. 4 GB - 128 GB)	32 GB (opt. 4 GB - 256 GB TLC)	8 GB (opt. 4 GB - 128 GB)
NAND Flash	– (opt. 128 MB - 2 GB)	–	–
SPI Flash	– (opt. up to 8 MB)	–	– (opt. up to 8 MB)
RAM	512 MB DDR3 (opt. 128 MB - 2 GB)	2 GB LPDDR4 (opt. 512 MB - 2 GB)	2 GB LPDDR4 (opt. 512 MB - 4 GB)
EEPROM	4 kB (opt. up to 32 kB)	4 kB (opt. up to 32 kB)	4 kB (opt. up to 32 kB)
SOFTWARE			
Operating system	 Linux (Yocto based)	Linux (Yocto based)	Linux (Yocto based)

Interfaces

Ethernet	2x 10/100BASE-T	1x 10/100BASE-T, 1x 10/100/1000BASE-T	2x 10/100/1000BASE-T
USB	1x USB-A (+3x host via phyRail and internal connector)	1x USB-A (+3x host via phyRail and internal connector)	1x USB-A (+3x host via phyRail and internal connector)
Serial	1x RS-232 (with flow control, isol.) or 2x RS-232 (without flow control, isol.) or 1x RS-232 + 1x RS-485 (isol.)	2x RS-232 (without flow control, isol.) or 1x RS-232 + 1x RS-485 (isol.)	1x RS-232 (with flow control, isol.) or 2x RS-232 (without flow control, isol.) or 1x RS-232 + 1x RS-485 (isol.)
CAN	1x CAN isolated, second CAN available as TTL-signals on internal connector	1x CAN FD isolated, second CAN available as TTL-signals on internal connector	1x CAN FD isolated
Wireless	LTE optional (WLAN/Bluetooth on request)	LTE optional (WLAN/Bluetooth on request)	LTE optional (WLAN/Bluetooth on request)
Digital I/O	via phyRail extension module or internal	via phyRail extension module or internal	via phyRail extension module or internal
MMC/SD/SDIO	microSD Card Slot	microSD Card Slot	microSD Card Slot
Sensors	Temperature	Temperature	Temperature
DIN Rail Extension	phyRail extension bus (2x USB host, 1x SPI, 1x I²C)	phyRail extension bus (2x USB host, 1x SPI, 1x I²C)	phyRail extension bus (2x USB host, 1x SPI, 1x I²C)
User Control Elements	1x Button (programmable), 1x LED (Status), 2x LED (programmable)	1x Button (programmable), 1x LED (Status), 2x LED (programmable)	1x Button (programmable), 1x LED (Status), 2x LED (programmable)

Physical Data

RTC	Real-time clock with GoldCap, optional lithium cell for 10+ years buffering	Real-time clock with GoldCap, optional lithium cell for 10+ years buffering	Real-time clock with GoldCap, optional lithium cell for 10+ years buffering
Power Supply	9 V - 36 V	9 V - 36 V	9 V - 36 V
Housing	Phoenix ICS	Phoenix ICS	Phoenix ICS
Dimensions	110 mm x 100 mm x 25 mm	110 mm x 100 mm x 25 mm	110 mm x 100 mm x 25 mm
IP protection Class	IP20	IP20	IP20
Operating temperature*	-20 °C to +60 °C	-20 °C to +60 °C	-20 °C to +60 °C
Certification	CE, UL	CE, UL	CE, UL

* Extended temperature range on request



www.phytec.eu/phygate-tauri-s



www.phytec.eu/phygate-tauri-m



www.phytec.eu/phygate-tauri-l