XR0054 eMain Module Data Sheet

The XR0054 is the control module of each Astribank unit. The module uses the XPP (Xorcom Peripheral Protocol) to communicate with the Asterisk® server, and an internal Astribank SPI (Serial Peripheral Interface) to communicate with the internal Astribank modules.

The XR0054 produces the 3.3 VDC needed to run all the modules and the special telephony voltages (-24 to -30 volts for analog telephones normal operation and -80 to -92 Volts for the ring current). The module uses 12 VDC at a maximum current of 5 Ampere.

A large scale integration FPGA (Field Programmable Gate Array) runs the XPP firmware, which coordinates all the logic and timing events necessary to run the Astribank.

The USB 2.0 interface supports a theoretical data flow of 480 Mbits/second, more than enough for any Astribank application. Each Astribank is equipped with two USB ports to support the TwinStar option (more information about TwinStar is available on the Xorcom Web site).

The maximum number of telephony channels supported by a single XR0054 is 144 (4 E1/T1 PRI channels + 24 analog channels).

Each eMain module is capable of running the Xorcom hardware-based echo canceller module. This echo cancellation module can support up to 144 channels. The eMain module can support up to four Astribank modules and a cooling fan.

The eMain module stores the Astribank licenses that are necessary to activate the telephony modules.

When driving FXS modules, forced-air cooling is mandatory to assure reliable, long term module operation.

XR0054 Front View

XR0054 Top View

Environmental Operation Information

- Temperature: 0-40 degrees Centigrade
- Humidity: up to 95%, non-condensing

Physical Dimensions

- 90x105 Millimeters

Certifications

- FCC 47CFR part 15 subpart B
- RoHS
- EC
- XPP (Xorcom Peripheral Protocol) compliant

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