

3-in-1 Solution for Dramatic Cost Savings

Moxa's MIRF computers are modular devices with a 3-in-1 design. They combine a router, a computer, and a powerful software framework all in a single device. If you are looking for combined router and computing solutions, a single MIRF computer will fulfill your wireless needs. A MIRF computer is a system-level solution that lets you cut costs by bundling router, computer and software costs into one neat package.

Because it's a part of Moxa's Rcore software platform, MIRF computers allow customers to shorten project lead times by cutting the "Demonstration and Validation" phase into a simple, concise "Development" phase.



Get Faster Time-to-Market with the Mobile Intelligent Routing Framework

Develop Ready-to-Run Mobile Communication & Computing Applications



| | UC-8481 | V2422 | V2426 | EPM-3337 | EPM-DK02 |
|-------------------------------|-----------------------------------|--|--|---|--|
| CPU | Intel XScale IXP435 | Intel Atom N270 1.6 GHz | Intel Atom N270 1.6 GHz | | |
| Ethernet LAN | 10/100 Mbps x 2 (M12) | 10/100/1000 Mbps x 2 (RJ45) | 10/100 Mbps x 2 (M12) | | |
| Serial Ports | 2 x RS-232/422/485 | 4 x RS-232/422/485 | 4 x RS-232/422/485 | | |
| DI/DO | DI x 4, DO x 4 (0 to 30 VDC) | DI x 4, DO x 4 (0 to 30 VDC) | DI x 6, DO x 2 (0 to 30 VDC) | | |
| Display | n/a | VGA + DVI-I | VGA + DVI-I | | |
| USB 2.0 Hosts | 2 (Type A) | 6 (Type A) | 3 (M12 x 1, Type A x 2) | | |
| Power Input | 24 VDC | 9 to 36 VDC | 12 to 48 VDC | | |
| Power Connector | M12 | Terminal Block | M12 | | |
| Certifications | CE/FCC EN 50155 EN 50121 | CE/FCC e Mark | CE/FCC EN 50155 EN 50121 | | |
| Expansion Slot | CF | CF | CF | | |
| OS Storage | NOR Flash | DOM | DOM | | |
| Operating Temp. Ranges | -25 to 70°C, EN 50155 Class T3 | -40 to 70°C | -40 to 70°C, EN 50155 Class Tx | | |
| Dimensions | 200 x 57 x 120 mm | 275 x 154 x 86 mm | 275 x 154 x 86 mm | | |
| Storage | n/a | 2 SATA-II connectors for storage expansion | 2 SATA-II connectors for storage expansion | | |
| | | | | Cellular Interface | PCI Express Mini Slot |
| | | | | Frequency Bands | Interface |
| | | | | <ul style="list-style-type: none"> UMTS/HSDPA: Triple band, 850/900/1900 MHz GSM/GPRS/EDGE: Quad band, 850/900/1800/2100 MHz GSM DSS: Small MS | Slot 1: PCI-Express V1.0 (one lane) / USB 2.0 Slot 2: USB 2.0 |
| | | | | GPS Interface | |
| | | | | <ul style="list-style-type: none"> NMEA-0183 V2.3, E911 AGPS Control plane, GPS dedicated AT commands, Date WGS-84 | USB 2.0 BusSIM CardHolder |
| | | | | WLAN Interface | Environmental Limits |
| | | | | <ul style="list-style-type: none"> IEEE 802.11a/b/g/n for client/bridge mode IEEE 802.11b/g/n for AP mode (Linux OS only) | Operating Temperature |
| | | | | AP-only Protocols | <ul style="list-style-type: none"> -40 to 55°C, EN 50155 Class T1 |
| | | | | Environmental Limits | |
| | | | | Operating | <ul style="list-style-type: none"> -25 to 55°C, EN 50155 Class T1 |
| | | | | | <ul style="list-style-type: none"> WiMax and LTE can be supported by adding a 3rd party mini PCI/e card. Moxa can integrate devices to accommodate your preferred WiMax card or LTE card. Contact Moxa for details. |

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Get the Framework with the Fastest Time-to-Market

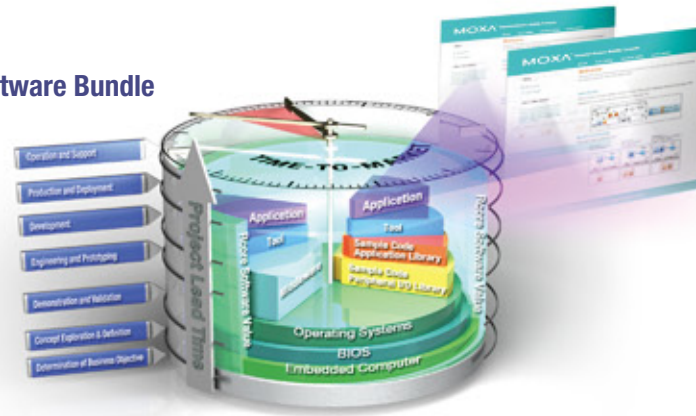
What is the Mobile Intelligent Routing Framework?

Moxa's MIRF (Mobile Intelligent Routing Framework) is a full-stack software framework that simplifies the coding of Multiple-WAN routing applications for wireless computers, speeding up application development processes and significantly shortening custom development times.

Crank Up Rcore Customizations with the Free MIRF Software Bundle

In order to provide commercial-grade multimedia services, system integrators need to develop more value-added software. Unfortunately, open programmable platforms for development may not be readily available.

MIRF software is built on the Rcore application layer. Moxa's Rcore solutions provide flexible and customizable APIs that are easily implemented in existing platforms.



Supports Multiple Heterogenous WANs and Inter-WAN Handoffs

- Provides passengers with Wi-Fi convenience even when traveling across wide geographies
- QoS and traffic shaping: bandwidth is easily optimized to preclude network bottlenecks
- Unbeatable wireless connectivity: stable, reliable, and secure

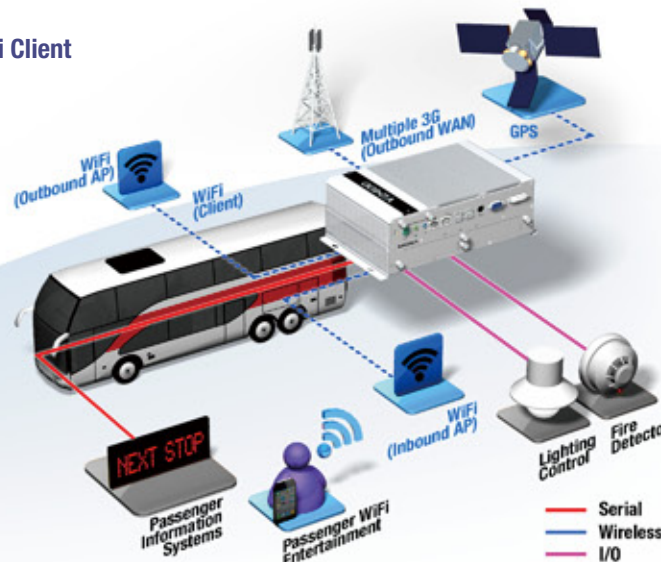


Engineered for Transport Applications

- Vehicular Wi-Fi
- Passenger Information Systems (PIS)
- Vehicle Telemetry and Diagnostics
- Fleet Logistics and Passenger Management

MIRF Summary: An on-board Wi-Fi AP, Cellular Router, & Wi-Fi Client

- Provide WLAN access points for passenger entertainment and connectivity
- Configure intelligent policy settings to auto-select WANs:
 - May connect to multiple 3G WANs via cellular services
 - May connect to Wi-Fi WANs via off-vehicle base stations
 - Dual 3G and Wi-Fi capabilities give system redundancy for additional reliability
- Passenger Information Systems (PIS) may display destination info, estimated arrival times, and passenger announcements
- Diagnostics for on-board lighting and fire suppression systems



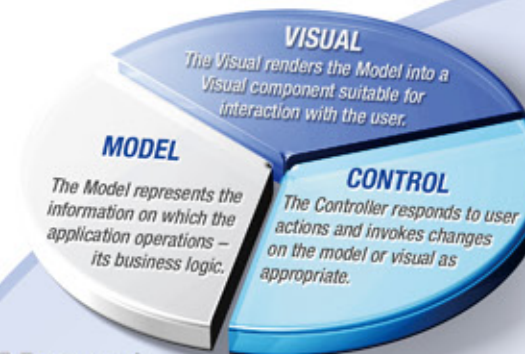
Guarantee Flexibility and Ease of Integration with MIRF: A Full Stack, Open MVC Architectural Framework

Easy Customization Shortens Lead Times

MIRF provides high flexibility for configuring and customizing utility applications. Based on the MVC framework, MIRF allows users to configure the interface as needed. For example, web browsers, SNMP utilities, and consoles can all be customized for specific needs, and new functions can be easily added.

MIRF also provides an open platform for programmers to develop and configure systems with less effort. Customization and system setups can be easily and quickly achieved, making faster time-to-market possible.

- Ready-to-run, with a full library of software and component templates
- Easily leverage open source software packages
- Easily bundle customer applications
- Highly adaptable for both front-end and back-end development



MVC Framework

Friendly Web-based Configuration UI

The Mobile Intelligent Routing Framework provides an easy-to-use, web-based UI to simplify remote configuration. Intelligent policy settings are just a click-and-go convenience, letting engineers focus on the case-by-case details of customization rather than toilsome standard routines.

Effortless Set Up

The MIRF configuration wizard allows users to set up devices for the most common networking arrangements quickly, with minimum hassle. Choose from three preconfigured networking topologies, and follow the choices through a simple process that is as close to effortless as network configurations can get.



MIRF Framework



Intelligent Policy Settings for Configuring WAN Preferences

Pre-defined Policies for Large Bandwidth, Best Signal, or Lowest Cost

- Time of Day/Week/Month**
 - Get lower service rates by selecting preferred WANs according to the time of use
- Geography**
 - Specify preferred WAN services according to geographic coordinates
- Vehicular Speed**
 - Trigger alternate roaming methods to match shifts in vehicular speed
- Device Connection**
 - Specify a signal stability threshold for network and channel selection using regulated ping intervals
 - Trigger preferred connections according to signal strength