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450mp Carrier Board (450DA) Tech Brief

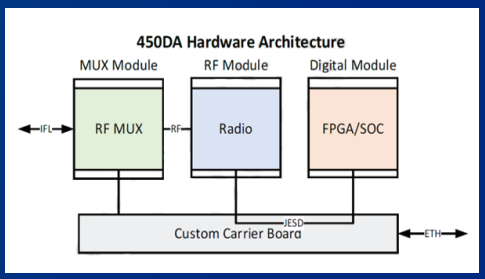
The innovative three board modular design of the 450mp enables integrators to build their own carrier boards allowing for maximum flexibility in terminal design. While the radio (RF) and compute (digital) modules are the main building blocks of the modem, the Carrier Board is the foundation, used to combine DC power and the BUC/LNB tone to control the IFL. The iDirectGov Carrier Board is available as a reference design to enable integrators to adapt their own design.

Why customize my own Carrier Board?

Form Factor: Changing the Carrier Board design enables integrators to modify the remote's size and shape to be more suitable for custom design.

Feature Customization: The ability to customize the feature list enables the remote to align with the requirements of the individual use cases more closely.

Terminal Integration/Consolidation: The 450DA architecture can be integrated at the board level with additional board components.



What's included in the development kit?

The 450mp Carrier Board Development Kit contains all the tools required by an integrator to create a custom carrier board. The kit contains the following elements:

- 1 RU Chassis with the following integrated components:
  - 450 compute (digital) module, radio (RF) module, carrier board & mux
  - I/O breakout board
  - Cabling
  - Chassis fans
- 16 hours of iDirectGov Engineering

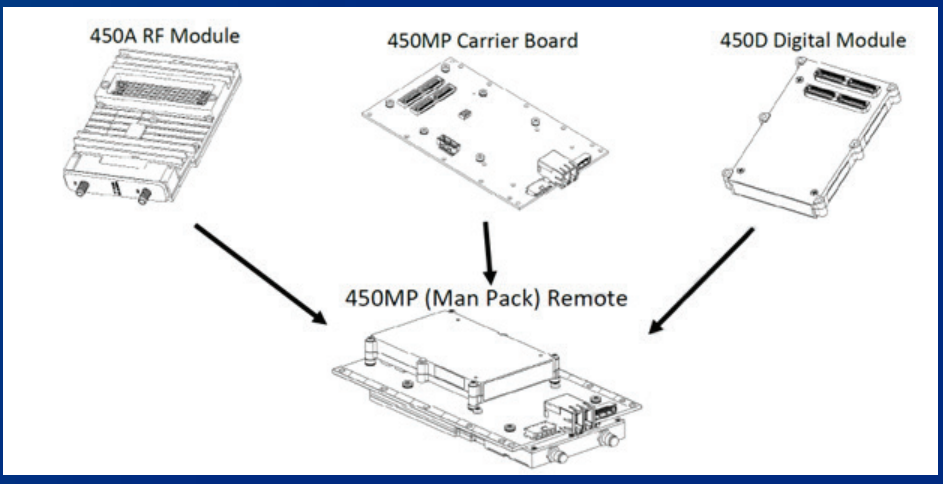
The carrier board is responsible for the following functions:

- Power
- Clock functions
- Interconnection: between the compute (digital) module and the radio (RF) module, and to the external I/Os
- Ethernet physical layer to the LAN interface
- Thermal sensing

Designed to Open Standards

Although modular in design, software interfaces on the 450mp are designed to meet open standards.

- OpenAMIP for antenna control
- OpenBMIP for BUC control
- Web API
- Graph/QL/Websocket



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