Development of 50 kVA Universal Inverter Module

Objective:
To develop a universal inverter module for multiple applications.

Features:
- Multiple functions for Flexibility;
  1) Bidirectional dc-dc boost/buck;
  2) Rectification and Inversion.
- Self Contained;
  1) Power supply from the dc;
  2) V- and I- sensors;
  3) Interface to multiple monitor devices and control panels.
- Stand alone modular design;
- Laminated dc bus bar and compact system layout.

Application Examples:
- UPS/EPS, active power filter, motor drives with energy storage, renewable energy source inverter, etc.

System Block Diagram