

OM-1000 FUNCTIONAL BLOCK DIAGRAM

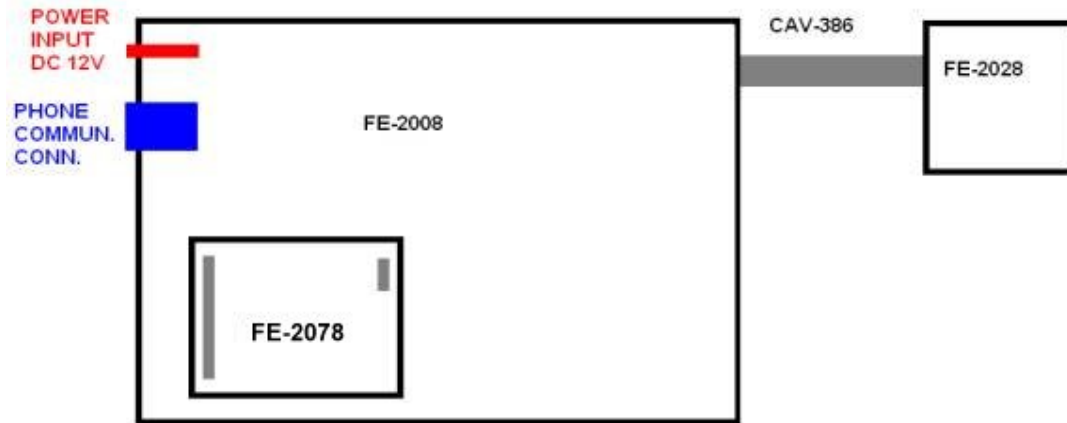


Fig. 1 OM-1000 PCBs BLOCK DIAGRAM

OM-1000 unit includes 3 printed circuit boards (PCBs):

- 1) FE2008 (GEL-2703) main board
- 2) FE2078 (GEL-2683) Bluetooth radio module
- 3) FE2028 (GEL-2611) gun connector board

The FE2008 board is powered by an external 12V DC supply (from AC/DC adapter) and includes:

- Power section:
 - Input power filter including transient current limiter
 - Over-Voltage protection
 - Fast-transient and EMI suppression circuit
- Digital section:
 - Microprocessor Renesas M16C/62P 16 bit (part number M30624FGPGP with LQFP100 package), 256KB on-chip flash, 20KB on-chip RAM, 24MHz, external 6MHz oscillator
 - SRAM 128KB KM6161002AT-20
 - M93C86-MN6 SO8 EEPROM 1KB SERIAL
- Interface and communication section:
 - USB 1.1 controller and transceiver Philips PDIUSB12PW
 - RS232 transceiver MAX202ECSE
 - Multi-interface circuit (it allows the multiplex of more interfaces into a single connector: in the same connector can be plugged three different cables, each for a distinct interface –RS232, USB, WEDGE-).
 - Radio Bluetooth board DLBTP-01: a 5V powered pcb that includes the Panasonic PAN1440 module.

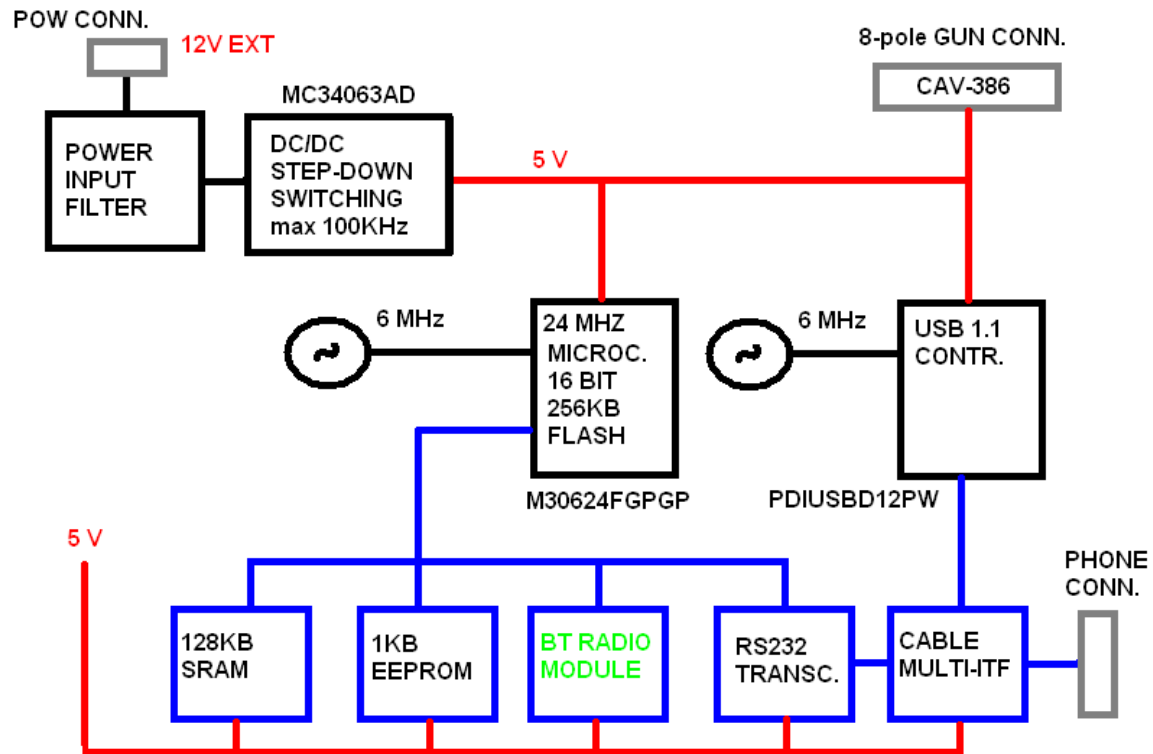


Fig. 2 - OM-1000 FE-2008 BLOCK DIAGRAM

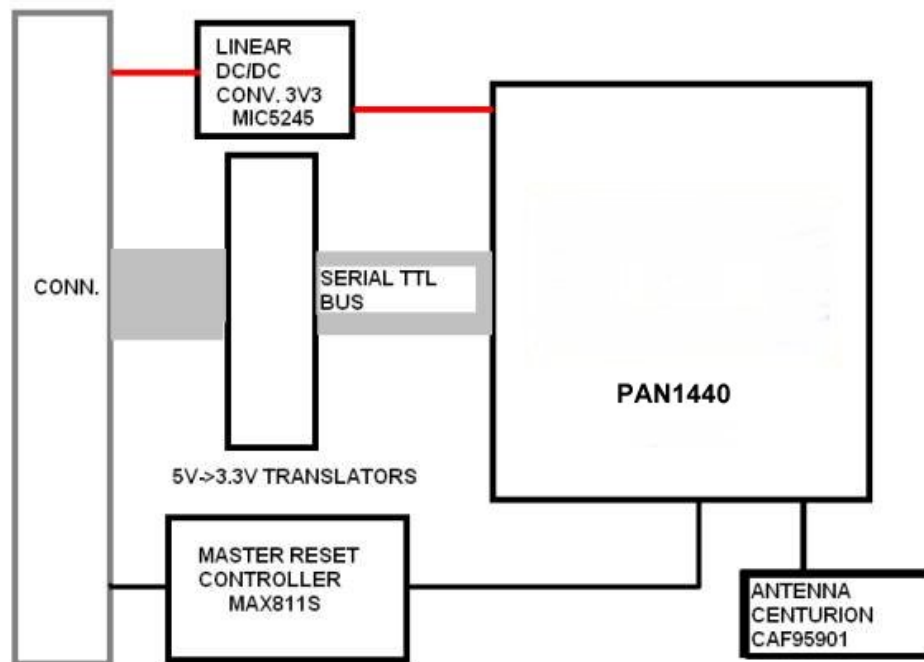


Fig. 3 FE2078 Block Diagram