



"Embedding thoughts into Technology"

Embin Technologies Private Limited
306, Sarita 2, Prabhat Industrial Estate,
Near Toll Naka, Dahisar East,
Mumbai - 400 068. India.
Tel : +91-22-28977128
+91-22-28977127
Fax : +91-22-28689486
Email : contact@embin.com
Website : www.embin.com

BACNet Gateway Development

Client:

A leader in development and production of mechanical and electronic products.

Requirement:

To write the BACnet stack. The existing devices shall be BACnet enabled using this stack. The messages received on the BACnet interface has to be translated to another proprietary protocol which is understood by the devices. The hardware used has an ARM7TDMI core with 4 MB flash and 4 MB RAM.

Solution:

The team developed firmware for a BACnet Gateway which is loaded on BACnet Control Card or BCP. The BCP is powered by ATACD microprocessor which has ARM7TDMI core. The BCP converts the BACnet packets to a proprietary protocol named FC which is used by the Variable Frequency Drives. Both these protocols i.e. FC and BACnet uses RS-485 for communication across nodes. The hardware has two UART's out of which one is used for communicating with VFD using FC protocol and the other is used for communicating with the BACnet client using BACnet (MSTP as the link layer). All the development was done on C++ where as the drivers and eCOS related development was done using 'C' language.

Hardware Components:

- » ACD micro-processor
- » NOHAU ARM Emulator