9-9-99

9 Sept 1999

John:

Three reqs attached:

1) Xilinx download cable: required for download of Xilinx CPLD chips; these are non-volatile chips that will be programmed in the lab , not in the system.

2) PHYTEC miniMODULE-167CAN: this is a development board using the 16 bit processor that Mick Brooks is using for the CAN bus. We only considered the old 8 bit Dallas 87C520 chip and the newer 16 bit Siemens C167 chip, and decided to go with the newer, 16 bit, processor. The Dallas chip would require an external CAN controller plus more glue logic for Flash memory. The Siemens chip has CAN integrated into the processor, has glue less interface to a large memory space, to accommodate large Flash memory banks for storing Xilinx configuration data, and probably is more efficient for use with the C compiler. Mick Brooks has been working with a PHYTEC board using the chip, and is pleased with both the hardware and the software tools. We will use this board primarily as a learning tool, to make sure we properly design the chip into our cards and can program it as required. There is a possibility it might end up being used as the controller in a test fixture at some point.

3) KEIL C compiler and tools: if we can get the educational discount, we should go ahead and purchase the tools now, so we will have full capability and support. If for some reason they will not continue providing the discount, we can use the evaluation software tools initially. They are limited to 4K executables, and have some other limitations, but should allow us to start learning the chip.

Chuck