



APPLICATION NOTE 5.19

COM20051 AND COM20051+ MEMORY MAPPING

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The COM20051/COM20051+ maps the Arcnet core into a 256 byte page of data memory space. This memory is physically located internally to the device and its default base address on power up is 0000h. This 256 byte page can be logically located anywhere within the 64K external data memory space while physically remaining on board. The location of this 256 byte page is pointed to by the Address Decode Register in the device. This Address Decode Register holds the upper 8 bits of the 16 bit address at which the 256 byte page boundary will start. The address of this Address Decode Register is FFFFh. This register is also logically located in external data memory space but physically located on the device. This register must be written to on power-up to properly locate the Arcnet core. .

The user must ensure that the Arcnet core's 256 byte page does not conflict with external memory, otherwise data bus contention will result. As an example, if the user has 32K of external data memory located from 0000h to 7FFFh then the Arcnet core should be mapped above this area, 8000H is suggested. The user will write 80h to address FFFFh on power up to properly map the core to this location.



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