REDOX
PROGETTI PER L'INDUSTRIA

Serial EEPROM Design Contest
MICROCHIP Tecnology Inc
2355 W. Chandler Blvd.
Chandler, AZ 85224-6199

We are pleased to submit You the following EEPROM application entitled:

"Connect EEPROM to uP without using extra pins."

We are:

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Projet description:

During the design of microprocessor sistems, it happens many times that pinout of uP is not enought to implement the functions the Customer add while the design progress.

In such a case the designer try to increse the "functions per pin", to avoid the redesign with a bigger uP. During the development of a CB radio (see diagram) the Customer ask for permanent memorization of radio parameters, but no pins were available to insert an EEPROM.

Fortunately the right idea arrived : to connect the memory across the fourRA0-RA3 display and keyboard selection lines; since they are keeped hight one per time, the memory is not activated during normal operation. When R/W operation is requested the uP stop display and keyboard operation, placing RC0-7 in three-state, and sending to 93C06 the R/W timing sequence. Since the memory writing time is very fast (few mSec.) the interrupt in display operation is barely visible. The Customer (**Midland**) was very satisfied.

Best regards
Angelo Boni