

Generating Basic Roms For the 1000 Series of Intelligent Operator Interfaces

As an alternative to the battery backed RAM, programs generated for the Eason 1000 and 1100 can be stored in an EPROM for recall.

You must use a 27C010 150 nanosecond 128K x 8 EPROM. Eason technology uses Intel Part # 27C010-150VIO in its products.

Your ASCII BASIC file can be burned into the ROM with only minor differences from the program you would normally store in the battery-backed RAM in the standard configuration. The only change is that your program must be preceded and followed by the text: Eason Technology (**both** followed by a carriage return). Please refer to the example below.

```
Eason Technology ←  
100 GOSUB ZBLDSTAR  
105 GOTO begin  
.  
.  
.  
205 CALL ZB():KEY OFF:REMOTE OFF:DIM ZBLDE%(2):ZBLDVID%=0  
210 ZBLDHLPS%=0:ZBLDSTOP$="PROGRAM FELL THROUGH TO SCREEN ":RETURN  
215 LABEL ZBLDPLCC  
Eason Technology ←
```

Once you have your ASCII file saved, you are now ready to begin the burn process. You need to use the binary load method to load the file into your ROM programmer. Once this is accomplished, burn the program into the EPROM with a 0 (zero) offset. That's all it takes.

When the eprom is ready, you need to install it into your 1000 series product. It goes in ROM socket U9 on the 1100, and in ROM socket U7 in the Model 1000. The installation instructions are in a separate tech note.

If you have an M03 option and Eason Technology Basic version 3.72 or greater, you may put more than one program in the ROM. For this, combine the basic programs into one text file with the header structure as shown. This example has three programs, note the short line of code added to headers 4-9. This code allows you the option of customising the error message that is written to the screen when the user selects a program number that is nonexistent.

```
Eason Technology ←  
.  
    (contents of program one)  
.  
Eason Technology ←  
Eason Technology 2 ←  
.  
    (contents of program two)  
.  
Eason Technology 2 ←
```

```

.
.      ← (contents of program three)
.
Eason Technology 3
Eason Technology 4
100 PRINT "That is not a valid program number"
Eason Technology 4
Eason Technology 5
100 PRINT "That is not a valid program number"
Eason Technology 5
Eason Technology 6
100 PRINT "That is not a valid program number"
Eason Technology 6
Eason Technology 7
100 PRINT "That is not a valid program number"
Eason Technology 7
Eason Technology 8
100 PRINT "That is not a valid program number"
Eason Technology 8
Eason Technology 9
100 PRINT "That is not a valid program number"
Eason Technology 9

```

Don't forget a carriage return at the end of the last header. This can go up to 'Eason Technology 9', and yes, you do need to put in a line for every header. There is a practical limit of 128k total for all nine programs, however. That means only two programs that are 64k in size, or nine programs that are about 13k in size. Now burn the eeprom using the same process described above.

To load in a particular program, insert the eeprom into U7 of the 1000, or U9 of the 1100. Once the unit is powered up, hit the Help key, then F4 (SYS). The Eason will now display the system help screen.

Use the ← and → keys to change the program number to load ('3' corresponds to the program with the header 'Eason Technology 3', etc.). Then hit the 'Y' key (SHIFT+↓) to tell the Eason to reboot upon exiting the help. Press F6 to exit the help, then 'Y' again to confirm the reboot. The Eason should now reset and load the chosen program.