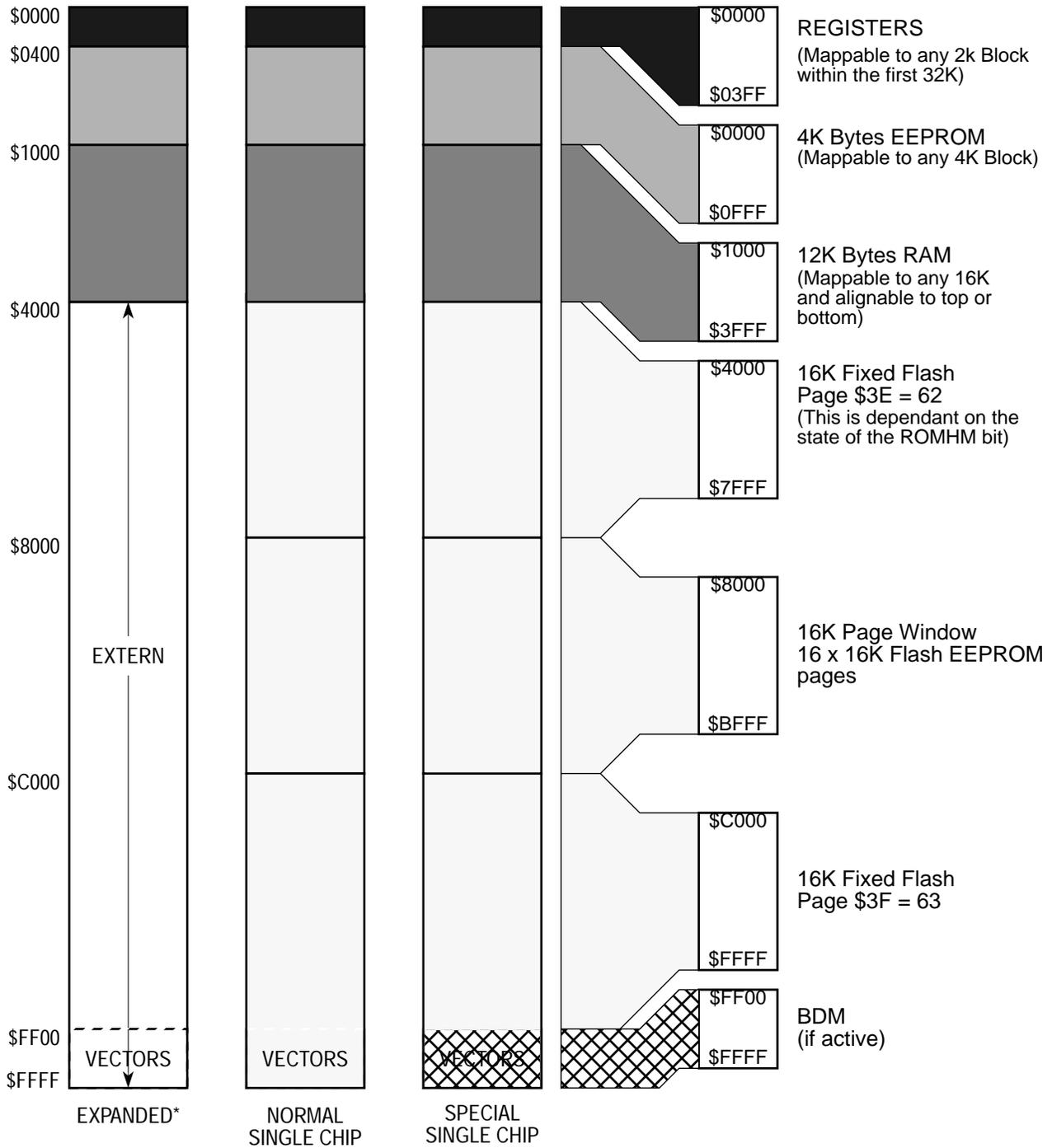


Resource Mapping



* Assuming that a '0' was driven onto port K bit 7 during reset.

Figure 8 MC9S12DP256 Memory Map after reset

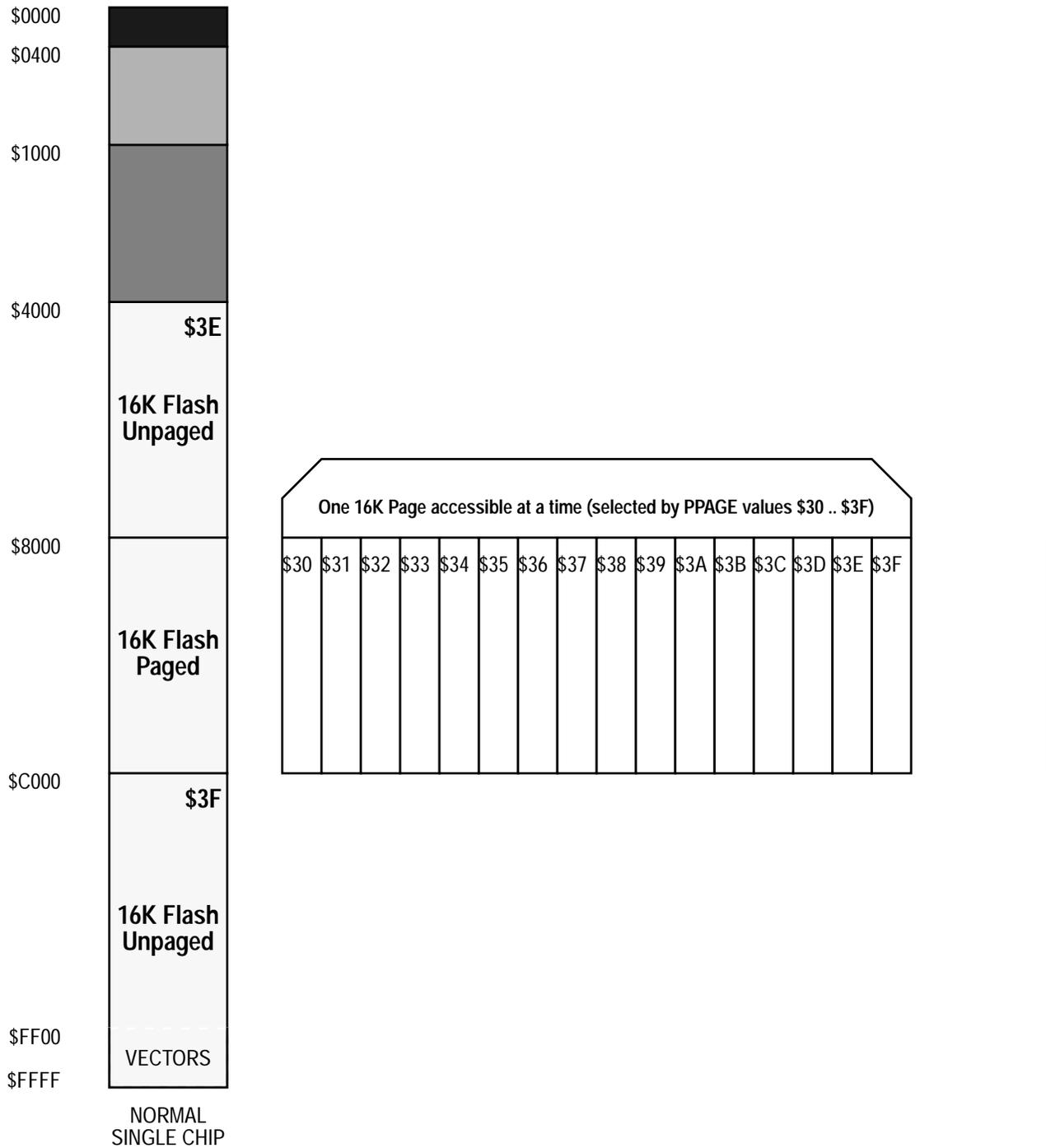


Figure 9 MC9S12DP256 Memory Paging

4.1.2 D-Bug12 EVB Mode Memory Map

When D-Bug12 is configured for operation in EVB mode, it runs as a ROM resident monitor. As with all ROM resident monitors, it utilizes some of the on-chip resources to perform its debugging functions. The tables in Figure 5 below detail D-Bug12's memory map when running on the 256K and 128K devices. In both cases, D-Bug12 requires 1024 bytes of the target MCU's on-chip RAM. For the 256K devices, the remaining 11K of RAM may be used for the development of application code. For 128K devices, the remaining 7K of RAM may be used for the development of application code. Note that the current implementation of D-Bug12 does not allow any of the MCU's Flash to be utilized by application code when running in EVB mode.

MC9S12Dx256		MC9S12Dx128	
Address Range	Description	Address Range	Description
\$0000 - \$03FF	I/O Registers	\$0000 - \$03FF	I/O Registers
\$0400 - \$0FFF	On-chip EEPROM	\$0800 - \$0FFF	On-chip EEPROM
\$1000 - \$3BFF	On-chip RAM (available to user)	\$2000 - \$3BFF	On-chip RAM (available to user)
\$3C00 - \$3FFF	On-chip RAM (D-Bug12)	\$3C00 - \$3FFF	On-chip RAM (D-Bug12)
\$4000 - \$EE7F	D-Bug12 Code	\$4000 - \$EE7F	D-Bug12 Code
\$EE80 - \$EEBF	User Accessable Function Table	\$EE80 - \$EEBF	User Accessable Function Table
\$EEC0 - \$EEFF	Customization Data Table	\$EEC0 - \$EEFF	Customization Data Table
\$EF00 - \$EF8B	D-Bug12 Startup Code	\$EF00 - \$EF8B	D-Bug12 Startup Code
\$EF8C - \$EFFF	Secondary Reset/Interrupt Table	\$EF8C - \$EFFF	Secondary Reset/Interrupt Table
\$F000 - \$FFFF	Bootloader	\$F000 - \$FFFF	Bootloader

Figure 5, D-Bug12 Memory Map In EVB Mode

Note that even though the MC9S12Dx256 parts contain 4K bytes of EEPROM, only the upper 3K bytes are visible as the lower 1K is overlaid by the I/O register block. Also, even though the tables in Figure 5 describe a 64K memory map, the D-Bug12 code occupies on-chip paged Flash memory beginning on page \$38. In addition, most of the lower and upper Fixed Flash pages are utilized by D-Bug12.