

GradeCom Enterprise Extensions

Technical Manual Volume 492

Extended CPU Operations

The GradeCom Enterprise CPU extensions enable a number of advanced features.

- Enhanced Memory Operations
- External Memory Banks
- Security Module
- VizNet Multicomp Bridge

Enhanced Memory Ops

Symbol, Usage	Description	Bytecode Equivalent
SAVR <src, page, offset>	Copy the value in the src register to the destination page and offset	0xD0
SAVW <page, offset>	Copy the full word (comprised of all 4 registers) to the destination page and offset	0xD1

Security Module

Symbol, Usage	Description
SXS <val>	Set security extension state 0x01 enabled 0x00 disabled
SXDEC <srcpage, dstpage>	Use the security extension to decrypt the src page into the dst page
SXENC <srcpage, dstpage>	Use the security extension to encrypt the src page into the dst page
SXKLOC <page, offset>	Use the key value found at the specified page and offset. All keys are 16 bytes long.

External Memory

Symbol, Usage	Description
DMOUNT <val>	mount the specified memory access port
DEVICT <val>	evict the specified memory access port
DMAP <val, page>	map the specified memory access port to a page in memory
DUNMAP <val>	unmap the specified memory access port from memory
DSYNC <val>	flush the mapped memory page to the device