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VOLATILE & NON-VOLATILE MEMORY IN LUMISTAR PRODUCTS

Lumistar uses a few components to store configuration, calibration, and set up information on our products.

None of these memories ever store received information. No PCM data is ever retained in the devices; it is either passed out – or if it is stored, it is archived on a separate hard drive

Below is a list of the components which contain memory and their purpose; followed by a table of Lumistar part numbers and the components it has.

VOLATILE MEMORY

SRAM – Used for storage during data processing, and boot up of the product.

DDRAM – Used for storage during data processing, and boot up of the product.

DSP – The Digital Signal Processing chip has 32kb of internal SRAM memory.

To clear volatile memory, remove power from the product.

NON-VOLATILE MEMORY

PCI - EEPROM with 1 kb of memory used to interface with the PLX PCI bridge chip.

FPGA – 16 kb of internal memory used during the loading of the FPGA.

EEPROM - 1 kb of memory used to store set up, calibration, serial number and other information unique to that product.

CPLD – Used for sequential boot up of components in densely populated products.

Clearing non-volatile memory will cause the product to not work. You can clear non-volatile memory by using strong magnetic fields, but again – NO RECEIVED DATA IS STORED OR RETAINED IN LUMISTAR CARD LEVEL PRODUCTS.

MEDIA

Lumistar Card Level Products do not have any media devices – tape, floppy or CD-DVD drives, hard drives, USB, memory cards or removable flash drives.

Lumistar does integrate its card level products into computer chassis that do contain hard drives, floppy drives, CD-DVD/RW drives and USB ports.

MEMORY USED VS. PRODUCT TYPE

PRODUCT	SRAM	DDRAM	DSP	PCI	FPGA	EEPROM	CPLD
LS-11 Test TX	256 kb		256 kb RAM 8kb flash		16 kb 1 kb flash		
LS-22 Display	256 kb Per Ch			1kb	16 kb 1 kb flash	1 kb	
LS-25/27 Receivers			5 kb SRAM 64 kb flash	1kb	16 kb 1 kb flash	1 kb	
LS-26 Airborne	32 kb		5 kb SRAM 64 kb flash			1 kb	
LS-32 Combiner		64 Mb		1kb			16 kb
LS-33 IF RCVR		64 Mb		1kb			16 kb
LS-38/58 IF RCVR	128 kb		5 kb SRAM 64 kb flash	1kb			
LS-40 Bit Sync			5 kb SRAM 64 kb flash		16 kb 1 kb flash	1 kb	
LS-50 Decom	4 Mb			1kb	16 kb 1 kb flash	2 kb	
LS-70 Simulator	4 Mb			1kb	16 kb 1 kb flash	2 kb	
LS-71 DAC	2 Mb			1kb	16 kb 1 kb flash	1 kb	