Statement of memory volatility HP Reverb G2 VR System

The purpose of this chapter is to provide information regarding erasing and resetting non-volatile memory integrated into the VR system (HMD / Controller / Cable). This chapter outlines instructions for restoring memory that can contain personal data or custom settings.
HP Business VR products that use ARM-based system boards contain non-volatile memory. The amount of non-volatile memory present in the system depends upon the system configuration and subcomponents as originally shipped from HP, assuming that no subsequent modifications have been made to the system and assuming that no applications, features, or functionality have been added to or installed on the system.

Non-volatile memory and volatile memory usage

The following table lists the Non-volatile memory and volatile memory regions that are integrated into the HP Reverb G2 VR system.

HMD section:

Non-volatile memory and volatile memory type on each sub-function	Amount (Size)	Does this memory store customer data?	Does this memory retain data when power is removed?	What is the purpose of this memory?	How is data input into this memory?	How is this memory write-protected?	How is this memory reset or cleared?
HMD Main MCU	RAM: 20K Bytes ROM: 6K Bytes + 192K Bytes (not customer accessible)	No	Yes	Stores system code and data.	Using HP HMD f/w patch package tool release on HP webpage.	This memory is not write-protected.	The RAM does not retain data after power removed, and ROM data will clear/update by HP package tool.
USB HUB Controller	RAM: 16K Bytes ROM: 32K Bytes (not customer accessible)	No	Yes	For usb hub initialization and f/w code execution space.	Hub chip load configs data from EEPROM.	There are no readily available user tools to write to this memory region.	The RAM does not retain data after power removed. There are no HP tools to modify this memory. Vendors may have tools to change settings in this memory region.

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USB HUB Controller EEPROM	128K bits	No	Yes	Store USB HUB configuration, firmware.	Programmed at the factory.	A utility is required for writing data to this memory and is available from hub vendor. Writing data to this ROM in an inappropriate manner can render the HMD non-functional.	There are no HP tools to write or modify this memory in any way. Hub vendors may have tools to change settings in this memory region.
Audio codec	64K bytes	No	Yes	Audio codec f/w code execution space.	Audio codec load configs data from flash ROM	The memory is not changed under standard operating conditions.	Third-party tools may be used to clear/write to this memory region.
Audio codec Flash ROM	2Mbits	No	Yes	Store Audio codec configuration firmware.	Programmed at the factory.	A utility is required for writing data to this memory and is available on the HP website. Writing data to this ROM in an inappropriate manner can render the HMD non-functional.	ROM data will clear/update by HP package tool.
FPGA IC Flash ROM	8 Mbits	No	Yes	Store FPGA chip configuration firmware.	Programmed at the factory.	A utility is required for writing data to this memory and is available from the chip vendor.	Chip vendor tools may be used to clear/write to this memory region.

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MIPI Bridge IC	RAM: 512K+8K Bytes	No	Yes	For MIPI f/w code execution space.	Load camera interface configuration firmware from connected Flash ROM.	A utility is required for writing data to this memory and is available from chip vendor.	The RAM does not retain data after power removed. Chip vendor tools may be used to clear/write to this memory region.
MIPI Bridge IC Flash ROM	8 Mbits	No	Yes	Store MIPI bridge chip configuration firmware.	Programmed at the factory.	A utility is required for writing data to this memory and is available from chip vendor.	Third-party tools may be used to clear/write to this memory region.
Blue tooth (BT) controller	RAM: 352K Bytes ROM: 848K Bytes (not customer accessible)	No	Yes	Store BT initial configuration firmware.	Programmed at the factory.	A utility is required for writing data to this memory and is available from chip vendor.	The RAM does not retain data after power removed Chip vendor tools may be used to write to this memory region.

Controller section:

Non-volatile memory and volatile memory type on each sub-function	Amount (Size)	Does this memory store customer data?	Does this memory retain data when power is removed?	What is the purpose of this memory?	How is data input into this memory?	How is this memory write-protected?	How is this memory reset or cleared?
Controller Main MCU	RAM: 128K Bytes ROM: 512K Bytes	No	Yes	Stores controller code and data execution.	Chip vendor tool required to load MCU code from connected Flash ROM.	This memory is not write-protected.	The RAM does not retain data after power removed.
Flash ROM for MCU	2M Bytes	No	Yes	Stores Main controller f/w code.	Programmed at the factory.	A utility is required for writing data to this memory and is available from chip vendor.	Chip vendor tools may be used to clear/write to this memory region.
Blue tooth (BT) controller	RAM: 352K Bytes ROM: 848K Bytes (not customer accessible)	No	Yes	Store BT initial configuration firmware.	Programmed at the factory.	A utility is required for writing data to this memory and is available from chip vendor.	The RAM does not retain data after power removed. Chip vendor tools may be used to write to this memory region.

Cable section:

Non-volatile memory and volatile memory type on each sub-function	Amount (Size)	Does this memory store customer data?	Does this memory retain data when power is removed?	What is the purpose of this memory?	How is data input into this memory?	How is this memory write-protected?	How is this memory reset or cleared?
Cable Main MCU	8K Bytes	No	Yes	Store cable initial configuration firmware.	Programmed at the factory.	A utility is required for writing data to this memory and is available from chip vendor.	Chip vendor tools may be used to clear/write to this memory region.

Recommended steps for clearing user data and custom settings

No user data is stored in memory of this product.

There is no tool available for clearing custom settings beyond manipulation of individual component memory using vendor and HP-supplied tools.

Questions and answers

Not available now.