Jan 12, 2023

Letter of Volatility

To Whom It May Concern.

This letter is to provide clarification and identify all volatile and non-volatile memory contained in the **ADALM-PLUTO** provided by Analog Devices, Inc.

Volatile

The following list of devices found on the ADALM-PLUTO contain registers or memory that is cleared or reset with a power cycle:

Part Number	Manufacture	Description
USB3320C-EZK	MICROCHIP TECHNOLOGY	Hi-Speed USB 2.0 ULPI Transceiver
MT41K256M16TW-107 IT:P	MICRON TECHNOLOGY	DDR3L SDRAM : 4GB x 16
AD9363ABCZ	ADI	RF AGILE TRANSCEIVER

Non-Volatile

The following parts contain non-volatile memory which does not clear on power cycle.

Part Number	Manufacture	Description	Purpose
MT25QU256ABA8E12-1SIT	MICRON TECHNOLOGY	1.8V, 256MB MULTIPLE I/O SERIAL FLASH MEMORY	The MT25Q is a high performance multiple input/output NOR technology serial Flash memory device. It is normally used to store boot configuration and device images.
XC7Z010-1CLG225C4334	XILINX	ZYNQ-7000 ALL PROGRAMMABLE SOC	The Zynq 7000 family includes PS and PL eFUSE settings, which are documented in https://www.xilinx.com/support/answers/65110.html The Zynq also includes a small externally connected battery (BBRAM), which can be used for encryption keys. The Battery is NOT on the PCB
FT230XQ-R	FTDICHIP	USB to UART Converter	Integrated 2048 byte EEPROM for storing device descriptors and CBUS I/O configuration

The data in the Zynq XC7035 Battery Backed RAM can be cleared by unplugging the SOM from the carrier. The SoC EFUSEs can not be examined after programming. These are documented in: https://www.xilinx.com/support/documentation/application_notes/xapp1175_zynq_secure_boot.pdf

The retained data in the MT25QU256ABA8E12-1SIT Serial Flash can be examined and erased by using low level mtd-utils. When examining serial flash, it is useful to understand what (if any) file system is used on the device.
http://www.linux-mtd.infradead.org/doc/general.html

If you require any further information, please feel free to contact your local ADI sales contact, or ask on the Linux software forums on ADI's Engineerzone:
https://ez.analog.com/community/linux-device-drivers/linux-software-drivers

Sincerely,

Andrei Cozma
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COS Team