



Adder Technology Limited  
Saxon Way, Bar Hill,  
Cambridge CB23 8SL UK

Tel: +44(0)1954 780044  
Fax: +44(0)1954 780081

[www.adder.com](http://www.adder.com)

**Letter of Volatility**  
**XD600 Series (XD642, XD641, XD614 & XD612)**

To whom it may concern,

*The XD600 Series of extenders comprises of a System-on-Chip (SoC), a processor subsystem, a variety of I/O devices including high speed serial transceivers (SERDES), external NAND flash memories for the SoC, USB, PHY & Audio circuitry and a power management subsystem.. Interconnects between these circuits are not accessible from outside the unit. Units all have the memory elements detailed below unless otherwise noted.*

Memory Type	Function /Purpose	User Accessible ?	Size	Volatile / Non Volatile	Process to clear
<b>FLASH</b>	Serial NAND Flash Program code; SoC configuration bitstreams; Unit identification (serial number); Configuration data	No (1)	1GB	Non-volatile	Perform Factory reset to erase user data and load default values
<b>FLASH</b> (XD642 Only)	Serial NOR Flash Configuration bitstream for USB PHY	No(1)	4 Mbit	Non-volatile	None (No user data)
<b>FLASH</b>	Serial NOR Flash Configuration bitstream for Copper PHY	No(1)	4 Mbit	Non-volatile	None (No user data)
<b>FLASH</b>	Processor Subsystem Main program code	No (1)	512KB	Non-volatile	None (No user data)
<b>SRAM</b>	Processor Subsystem Temporary storage of working data	No	96KB	Volatile	Power off
<b>FRAM</b>	Power management subsystem Ferroelectric RAM Program code	No(2)	2 KB	Non-volatile	None (No user data)
<b>SRAM</b>	Power management subsystem Temporary storage of working data	No	1024 Bytes	Volatile	Power off
<b>SRAM</b> (XD642 Only)	USB ULPI Transceiver Defined configuration registers providing temporary storage	No	512 Bits	Volatile	Power off
<b>SRAM</b>	Quad clock generator	No	2800 Bits	Volatile	Power off
<b>SRAM</b>	Copper PHY Defined registers providing temporary storage.	No	311298 Bits	Volatile	Power off
<b>SRAM</b>	USB Hub Defined configuration registers providing temporary storage	No	2KB	Volatile	Power off
<b>SRAM</b>	SoC on-chip SRAM Provides temporary storage of program code and working data.	No	Unknown	Volatile	Power off
<b>SRAM</b>	LED Driver Defined registers providing temporary storage	No	224 Bits	Volatile	Power off
<b>SRAM</b>	Audio Codec Defined registers providing temporary storage	No	558 Bits	Volatile	Power off



Adder Technology Limited  
Saxon Way, Bar Hill,  
Cambridge CB23 8SL UK

Tel: +44(0)1954 780044  
Fax: +44(0)1954 780081

[www.adder.com](http://www.adder.com)

- (1) *Content modification by user limited to downloading of digitally signed Adder firmware upgrade images and entering of configuration data using the provided on-screen display (OSD)*
- (2) *Content can only be altered via a return to factory and performing a hardware upgrade using a custom factory reconfiguration utility.*

End of document.

Created By: Darrin Steel

Date: 4<sup>th</sup> March 2022

Authorized By: Mark Kennedy

Position: Director of Governance & Compliance

Signed: 