



ARTON USB3.1 Specification

Version 1.1

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1. GENERAL DESCRIPTION



1.1. Introduction

FLEXON's ARTON is a removable flash disk drive with USB connection and can supports various storage capacities, which is fully compatible with both USB 1.1, USB 2.0 & & USB3.1 specification. It is a plug and play device, simply plug in into any USB port and it will automatically get detected by the computer as a removable drive. ARTON does not require any battery, cable or software drivers. It is compatible with any desktop or notebook computers with USB port. Experience the light weighted, compact design, super performance and fast data transfer with ARTON Drive.

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1.2. Product Overview

- ❖ **Capacity**
 - 8GB up to 128GB
- ❖ **Compatible with USB specification revision 1.1 and 2.0.**
- ❖ **Support Windows 2000 SP4 and Windows XP without device driver.**
- ❖ **Support MAC OS X and later without device driver (USB 1.1 speed).**
- ❖ **Support MAC OS 10.2.8 and later without device driver (USB 2.0 speed).**
- ❖ **Support MAC OS 10.8 and later without device driver. (USB 3.1 GEN 1 speed).**
- ❖ **Support Linux Kernel ver2.4.0 or above without device driver (USB 1.1 speed).**
- ❖ **Support Linux Kernel ver2.4.10 or above without device driver (USB 2.0 speed).**
- ❖ **Support Linux Kernel ver2.6.31 or above without device driver (USB 3.1 Gen 1 speed).**
- ❖ **No external power is required: DC 4.5V~5.5V from USB port.**
- ❖ **Transfer rate for USB interface:**
 - Super speed up to 5Gbit/sec for USB 3.1 GEN 1
 - High speed up to 480Mbits/sec for USB 2.0
 - Full speed up to 12Mbits/sec for USB 1.1
- ❖ **Low Power Consumption**
- ❖ **Dynamic and Static Wear Leveling Algorithm**
- ❖ **Hot Plug & Play**
- ❖ **RoHS Compliant**

2. PRODUCT SPECIFICATIONS



2.1. Power

Table 2-1 Power Consumption of ARTON

Item	Power Consumption (mA)
Read	<282
Write	<199
Idle	<86
Standby	<1.1

NOTES:

1. Power Consumption may differ according to flash configuration and platform.

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3. ELECTRICAL SPECIFICATIONS



3.1. DC Characteristic

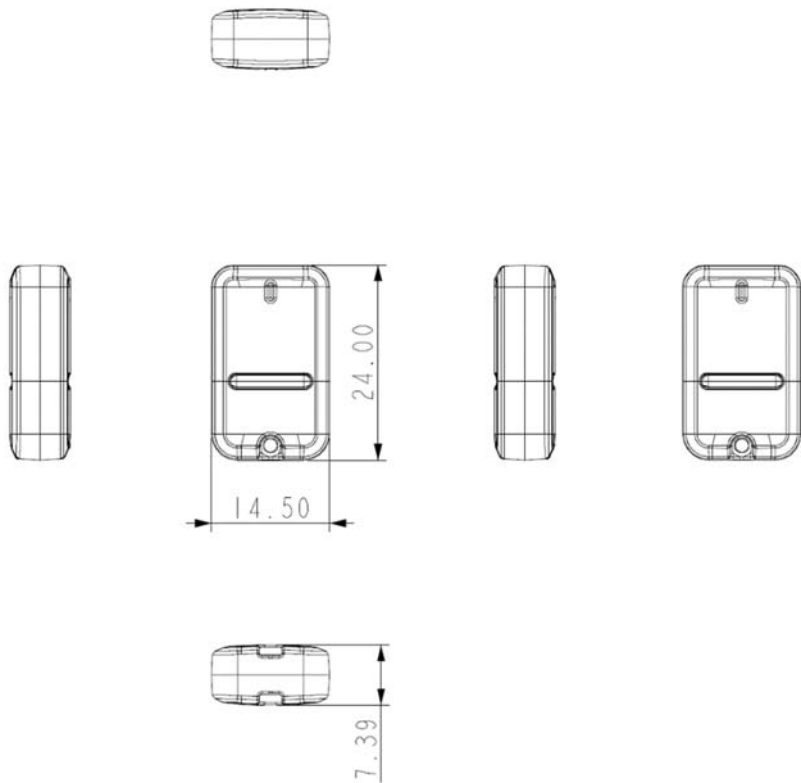
Table 3-1 ARTON DC characteristic of I/O cells

Symbol	Parameter	Conditions	Min	Typ	Max	Unit	
V _{CK}	Core Power Supply	Core Area	0.99	1.1	1.21	V	
V _{CC3IO}	Power Supply	1.8V I/O	1.62	1.8	1.98	V	
		1.2V I/O	1.13	1.2	1.3	V	
		3.3V I/O	3.0	3.3	3.6	V	
		2.5V I/O	2.35	2.5	2.7	V	
Temp	Junction Temperature		0	25	115	°C	
V _{IL}	Schmitt Trigger	V _{CC3IO} = 3.3V	0.35 x V _{CC3IO}			V	
	CMOS Trigger		0.5 x V _{CC3IO}				
	Differential		PAD_VREF				
V _{IH}	Schmitt Trigger		0.65 x V _{CC3IO}			V	
	CMOS Trigger		0.5 x V _{CC3IO}				
	Differential		PAD_VREF				
V _{IL}	Schmitt Trigger		V _{CC3IO} = 1.8V	0.41 x V _{CC3IO}			V
	CMOS Trigger			0.53 x V _{CC3IO}			
	Differential			PAD_VREF			
V _{IH}	Schmitt Trigger	0.69 x V _{CC3IO}			V		
	CMOS Trigger	0.53 x V _{CC3IO}					
	Differential	PAD_VREF					
V _{OL}	Output Low Voltage	I _{ol} = 2~16 mA		--	--	0.4	V
V _{OH}	Output High Voltage	I _{oh} = 2~16 mA		V _{CC3IO} -0.4	--	--	V
R _{pu}	Input Pull-Up Resistance	PU=high, PD=low		--	75	--	KΩ
R _{pd}	Input Pull-Down Resistance	PU=high, PD=low	--	75	--	KΩ	
I _{in}	Input Leakage Current	V _{in} = V _{CC3I} or 0	--	--	10	μA	
I _{oz}	Tri-state Output Leakage Current		-10	±1	10	μA	

4. PHYSICAL DIMENSION



Dimension: 24 (L) x 14.5 (W) x 7.4 (H) mm



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5. ORDERING INFORMATION

Capacity	MPN
8GB	FUUP008G-U3A
16GB	FUUP016G-U3A
32GB	FUUP032G-U3A
64GB	FUUP064G-U3A
128GB	FUUP128G-U3A

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Revision History

Revision	Release Date	History
1.0	2020/02	First release
1.1	2021/02	Update ordering information

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