

# RU150e USB 2.0 eUSB Flash Drive

SMART's RU150e USB 2.0 eUSB Flash Drives are designed as the main boot and storage device in embedded systems. The small form factor, lower power consumption, and fast access times, offer distinct technical advantages over more traditional mass storage devices. They are an ideal choice for missioncritical enterprise IT and field service applications.

SMART's RU150e USB 2.0 eUSB Flash Drives use a USB 2.0 high speed serial link and provide a simple two wire signaling interface to the host. They are offered with Single-Level Cell (SLC) NAND Flash. They provide enhanced reliability by incorporating onboard error detection and correction, and static and dynamic wear-leveling algorithms that provide reliable operation over a product's life.

## Features & Benefits

- SLC NAND Technology
- Supports Bootability with Standard BIOSs
- Low Power Dissipation: Less Than 0.45W Active (0.68W for 5V Version) and Less Than 10mW Standby
- Small Footprint Header: Industry Standard Header or Low Profile Stacking Header Available
- Optional Hardware Reset and Write Protect Support



## Applications

- ATCA Compute Blades
- Industry Standard Servers
- Networking
- Single-Board Computers for Defense, Gaming and Industrial Control Applications
- Telecom and Networking Routers and Switches

## Product Family Overview

Form Factor	Capacity	Sequential Performance
USB 2.0	1GB to 32GB	Up to 35MB/s Read
		Up to 27MB/s Write

# Specifications

	RU150e   USB 2.0   eUSB Flash Drive	
NAND Type	SLC	
Performance		
Sequential Read (maximum)	35MB/s	
Sequential Write (maximum)	27MB/s	
Reliability		
Data Retention	10 years > 90% life remaining	
	1 years < 10% life remaining	
Endurance	3 TBW per GB of capacity	
Error Correction	Advanced multi-bit error correction	
Power		
Vcc	Typical: 5.0 V	
	Maximum: 5.5 V	
Read	Typical: 72 mA	
	Maximum: 226 mA	
Write	Typical: 79 mA	
	Maximum: 21 mA	
Idle	Typical: 34 mA	
luie	Maximum: 55 mA	
Environmental		
Shock/Acceleration	Operating Half-Sine 70 in/sec, 3 shocks along each axis,	
	X, Y, Z, in each direction	
Vibration Operating	0.9 g rms, 10-500 Hz, 30 minutes per side (total of 6 sides)	
Vibration Non-Operating	Random 13.6 g rms, 10-500 Hz, 30 minutes per side (total of 6 sides)	
Operating Temperature	Commercial: 0°C to +70°C	
	Industrial: -40°C to +85°C	
Storage Temperature	-40°C to +85°C	
Humidity	5% to 95%, non-condensing, relative humidity	
Physical		
Length	36.9 mm	
Width	26.6 mm	
Height	7.5 mm	

## **Ordering Information**

Part Number	Density	
RU150e   USB 2.0   eUSB Flash Drive Commercial Operating Temperature (0°C to +70°C)		
SHEU32U032GQDUC	32GB	
SHEU32U016GQCUC	16GB	
SHEU32U008GQBUC	8GB	
SPEU32U004GQAUC2	4GB	
SHEU32U002GQ9UC	2GB	
SHEU32U001GQ4UC	1GB	
RU150e   USB 2.0   eUSB Flash Drive Industrial Operating Temperature (-40°C to +85°C)		
SHEU32U032GQDUI	32GB	
SHEU32U016GQCUI	16GB	
SHEU32U008GQBUI	8GB	
SPEU32U004GQAUI2	4GB	
SHEU32U002GQ9UI	2GB	
SHEU32U001GQ4UI	1GB	



For more information, please visit: www.smartm.com

\*Product images are for promotional purposes only. Labels may not be representative of the actual product.

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