

# 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	4GB to 32GB	Up to 35MB/s Read
		Up to 27MB/s Write

# Specifications

	RU150e   USB 2.0   eUSB Flash Drive		
NAND Type	SLC		
Performance			
Host Interface Rate (maximum)	USB 2.0		
Capacities	4GB to 32GB		
Sequential Read (maximum)	Up to 35MB/s		
Sequential Write (maximum)	Up to 27MB/s		
Reliability			
MTBF	> 3,900,000 hours		
	4GB: 160 TBW		
Endurance	8GB: 320TBW		
(Sequential Workload)1	16GB: 640 TBW		
	32GB: 1280 TBW		
ECC	LDPC		
Power			
Input Voltage	VCC: 5V± 5%		
Environmental			
Shock	200 g, 2 msec, 1 shock along each axis, X, Y, and Z		
Vibration	1.04g rms, 2 Hz to 200 Hz, 10 minutes each 3 axes		
Storage Temperature	Commercial: 0°C to +70°C		
	Industrial: -40°C to +85°C		
Storage Temperature	-40°C to +85°C		
Humidity	40°C, Operation: 90% RH, Storage: 93% RH		
Physical			
Length	36.9 mm		
Width	26.6 mm		
Thickness	7.5 mm		

# **Ordering Information**

Part Number	Density		
RU150e (2mm Connector)			
Commercial Operating Temperature (0°C to +70°C)			
SPEU52M032GQDUC2	32GB		
SPEU32M032GQDUC2	32GB		
SPEU52M016GQCUC2	16GB		
SPEU32M016GQCUC2	16GB		
SPEU52M008GQBUC2	8GB		
SPEU32M008GQBUC2	8GB		
SPEU52M004GQAUC2	4GB		
SPEU32M004GQAUC2	4GB		
RU150e (2mm Connector)			
Industrial Operating Temperature (-4	0°C to +85°C)		
SPEU52M032GQDUI2	32GB		
SPEU32M032GQDUI2	32GB		
SPEU52M016GQCUI2	16GB		
SPEU32M016GQCUI2	16GB		
SPEU52M008GQBUI2	8GB		
SPEU32M008GQBUI2	8GB		
SPEU52M004GQAUI2	4GB		
SPEU32M004GQAUI2	4GB		
RU150e (Low Profile Connector)			
Commercial Operating Temperature (0°C to +70°C)			
SPEU52U032GQDUC2	32GB		
SPEU32U032GQDUC2	32GB		
SPEU52U016GQCUC2	16GB		
SPEU32U016GQCUC2	16GB		
SPEU52U008GQBUC2	8GB		
SPEU32U008GQBUC2	8GB		
SPEU52U004GQAUC2	4GB		
SPEU32U004GQAUC2	4GB		
RU150e (Low Profile Connector)			
Industrial Operating Temperature (-4	0°C to +85°C)		
SPEU52U032GQDUI2	32GB		
SPEU32U032GQDUI2	32GB		
SPEU52U016GQCUI2	16GB		
SPEU32U016GQCUI2	16GB		
SPEU52U008GQBUI2	8GB		
SPEU32U008GQBUI2	8GB		
SPEU52U004GQAUI2	4GB		
SPEU32U004GQAUI2	4GB		

(Page 2 of 3 - Continued on next page)



## **Ordering Information**

Part Number	Density		
RU150e (STD Profile Connector)			
Commercial Operating Temperature (0°C to +70°C)			
SPEU52L032GQDUC2	32GB		
SPEU52L016GQCUC2	16GB		
SPEU52L008GQBUC2	8GB		
SPEU52L004GQAUC2	4GB		
RU150e (STD Profile Connector)			
Industrial Operating Temperature (-40°C to +85°C)			
SPEU52L032GQDUI2	32GB		
SPEU52L016GQCUI2	16GB		
SPEU52L008GQCUI2	8GB		
SPEU52L004GQAUI2	4GB		



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

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

#### Headquarters/North America:

T: (+1) 800-956-7627 • T: (+1) 510-623-1231 F: (+1) 510-623-1434 • E: info@smartm.com

#### Latin America:

T: (+55) 11 4417-7200 • E: sales.br@smartm.com

#### EMEA:

T: (+44) 0 7826-064-745 • E: sales.euro@smartm.com

#### Asia/Pacific:

T: (+65) 6678-7670 • E: sales.asia@smartm.com

#### Customer Service:

T: (+1) 510-623-1231 • E: customers@smartm.com

©2025, SMART Modular Technologies, All rights reserved. The stylized "S" in conjunction with "SMART", as well as "SMART Modular Technologies" are registered trademarks of SMART Modular Technologies. All other trademarks are the property of the respective owners. These materials are provided by SMART Modular Technologies as a service to its customers and may only be used for informational purposes. 02.03.25/RU150e\_USB 2.0\_eUSB/Rev.6