

Ordering Information

Viking Part Number	Capacity
VRFDUC32048ZCWxx	2GB
VRFDUC34096ZCWxx	4GB
VRFDUC38192ZCWxx	8GB
VRFDUC38192ZCD01	8GB
VRFDUC3016GZCB01	16GB

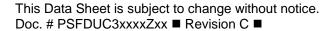
Notes:

1. Storage capacity listed will vary due to formatting and additional functions, and therefore entire capacity listed may not be available for storage.

Features

- USB specification v2.0 high speed compatible
 USB Bulk-Only transport
- 5.0V USB power option for embedded system
- USB class definition for bootability support
- Host Interface Speed 60MB/s
- Remote Write Protect and drive Reset Control options available

- Drive Activity indicator signal
- Firmware upgradeable via USB bus
- Low power Dissipation- less than .45W active and less than 1mW standby
- Solid State Drive, Non Volatile Memory
- RoHS Compliant (see last page)

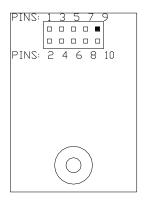






CONNECTOR PIN ASSIGNMENTS

Pin and Signal Descriptions

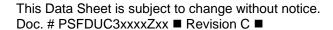


Signal and Power Description Tables

eUSB Connector Pin Signal Definitions

Pin	Signal Name	Type	Description	
1	VBUS	Power	5V power supply (3.3V BOM optional)	
2	NC	NC	Not connected, (HWP optional)	
3	DM	I/O	USB 2.0 Data Negative Pin	
4	NC	NC	Not connected	
5	DP	I/O	USB 2.0 Data Positive Pin	
6	NC	NC	Not connected, (HRST optional)	
7	GND	Power	Ground	
8	NC	NC	Not connected	
9	N/A	Key	Polarization	
10	#Activity	I/O	Status signal that indicates when the drive is busy. This signal may be used to drive a low current LED or other logic on the host to indicate drive status to the user or system. This signal is active low and has a 4mA drive strength.	

Notes:







PERFORMANCE

Sequential Reads	IOps	MBps
4k_seq_100rd	1997.505	7.802752
256k_seq_100rd	133.1658	33.29146
Sequential Writes	IOps	MBps
4k_seq_100wr	1948.982	7.613213
256k_seq_100wr	102.3058	25.57645
Random Reads	IOps	MBps
Random Reads 4k_ran_100rd	IOps 1177.727	MBps 4.600496
	•	
4k_ran_100rd	1177.727	4.600496
4k_ran_100rd 256k_ran_100rd	1177.727 126.9157	4.600496 31.72892

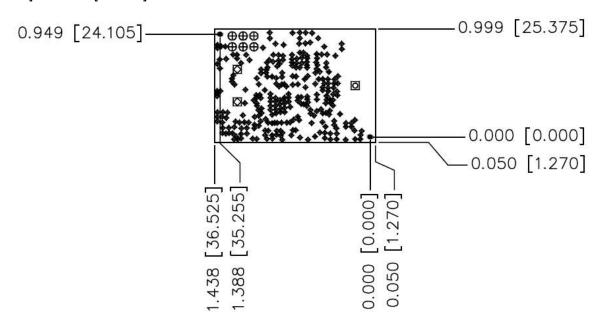
Notes:

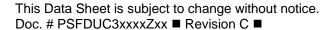
Based on VRFDUC34096ZCWA1, pSLC Hynix USB2642, IOmeter 2006

MECHANICAL DIMENSIONS

Dimensions are in inches [mm]. Tolerance is +/- 0.15mm

1.488 [37.650] x 1.05 [26.502] as detailed below:



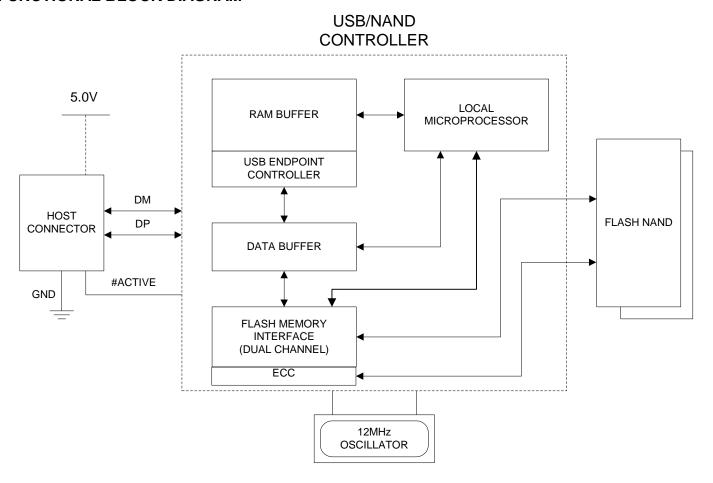






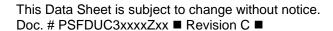
Profile based on 1539 PCB

FUNCTIONAL BLOCK DIAGRAM



Notes:

1) 8/15bit 528B BCH ECC







ABSOLUTE MAXIMUM RATINGS

Parameter	Symbol	Value	Unit
5.0 Supply Voltage	VBUS	-0.3 ~ 5.5	V
Input Voltage	VIN	GND - 0.5 ~ VCC + 0.5	V
Storage Temperature	TST	-40 ~ 85	°C

ENVIRONMENTAL SPECIFICATIONS

Parameter	Value
Operating Temperature (Commercial Temp):	0 to 70 °C
Operating Temperature (Industrial Temp):	-25 to 85 °C

DC CHARACTERISTICS

Full-Speed Operation (TA = 25°C, VBUS = 5.0V, VSS = 0V)

Parameter	Symbol	Test Conditions	Min	Тур	Max	Unit
	U	ISB Signals				
Supply Voltage:	VBUS		4.75	5.0	5.25	V







REVISION HISTORY

Revision	Release Date	Description of Change	Checked By (Full Name)
А	March 10, 2015	Initial release (Modify PSFEP1XXXXXYXX3_LF_D). Change pin assignment table	
В	February 10, 2016	Add PN VRFDUC38192ZCD01 per DVT lab	
С	May 23, 2017	Add VRFDUC3016GZCB01. Change logo and company address	

STATEMENT OF COMPLIANCE

Viking Technology (tm), Sanmina Corporation ("Viking") shall use commercially reasonable efforts to provide components, parts, materials, products and processes to Customer that do not contain: (i) lead, mercury, hexavalent chromium, polybrominated biphenyls (PBB) and polybrominated diphenyl ethers (PBDE) above 0.1% by weight in homogeneous material or (ii) cadmium above 0.01% by weight of homogeneous material, except as provided in any exemption(s) from RoHS requirements (including the most current version of the "Annex" to Directive 2002/95/EC of 27 January, 2003), as codified in the specific laws of the EU member countries. Viking strives to obtain appropriate contractual protections from its suppliers in connection with the RoHS Directives.

