Following the acquisition of Adesto Technologies, Dialog Semiconductor offers memory products as part of its product portfolio. The existing content from datasheets, including part numbers and codes should be used. Terms of Purchase are provided on the Dialog website

https://www.dialog-semiconductor.com/general-terms-and-conditions-purchase

View our Dialog memory products portfolio:

www.dialog-semiconductor.com/products/memory

Contacting Dialog Semiconductor

United Kingdom (Headquarters)
Dialog Semiconductor (UK) LTD
Phone: +44 1793 757700

Germany
Dialog Semiconductor GmbH
Phone: +49 7021 805-0

The Netherlands
Dialog Semiconductor B.V.
Phone: +31 73 640 8822

Email:
enquiry@diasemi.com

North America
Dialog Semiconductor Inc.
Phone: +1 408 845 8500

Japan
Dialog Semiconductor K. K.
Phone: +81 3 5769 5100

Taiwan
Dialog Semiconductor Taiwan
Phone: +886 281 786 222

Web site:
www.dialog-semiconductor.com

Hong Kong
Dialog Semiconductor Hong Kong
Phone: +852 2607 4271

Korea
Dialog Semiconductor Korea
Phone: +82 2 3469 8200

China (Shenzhen)
Dialog Semiconductor China
Phone: +86 755 2981 3669

China (Shanghai)
Dialog Semiconductor China
Phone: +86 21 5424 9058

AT25DF011

1-Mbit, 1.7V-3.6V Minimum SPI Serial Flash Memory

DATASHEET (ADDENDUM)

High Temperature Operation (125°C)

This data sheet addendum is to be used in conjunction with the existing AT25DF011 datasheet specifications. The Adesto AT25DF011 1Mbit Serial Flash devices will operate @ 125°C with the following datasheet caveats. All other parameters will meet the existing datasheet specifications.

The ordering code suffix (CAN# Code) 'HR' or 'HT' must be used to ensure correct operation at this extended temperature range. Adesto will not modify and republish the current datasheet to reflect the CAN# ordering code or the above caveats.The standard AT25DF011 datasheet is available at http://www.adestotech.com.

1. Electrical Specifications

1.1 DC and AC Operating Range

		AT25DF011-xxxHR
Operating Temperature		-40°C to +125°C
Endurance (Maximum)		20,000 Cycles

1.2 DC, AC, Program and Erase Characteristics

Symbol	Parameter	1.7V to 3.6V			2.3V to 3.6V			Units
		Min	Typ	Max	Min	Typ	Max	
I_{DPD}	Deep Power-Down Current		5	40		8.5	40	µA
I_{SB}	Standby Current		25	60		25	60	µA
I_{CC3}	Active Current, Program Operation		12	18		12	18	mA
f_{RDLF}	Maximum Clock Frequency for 03h			25			25	MHz
t_{PP}	Page Program Time (256 Bytes)		1.8	7		1.8	5	ms
t_{PE}	Page Erase Time		8	25		7	25	ms
t_{BLKE}	Block Erase Time (4K)		50	120		50	120	ms
	Block Erase Time (32K)		360	900		300	700	ms
t_{CHPE}	Chip Erase Time		1400	3600		1200	2500	ms
t_{BP}	Byte Program Time		12			12		µs
t_{CSH}	Chip Select High Time	40			25			ns

2. Ordering Code

2.1 Green Package Options (Pb/Halide-free/RoHS Compliant)

Ordering Code [1]	Package	Operating Voltage	Max. Freq. (MHz)	Operation Range
AT25DF011-SSHNHR-T	8S1	1.7V to 3.6V	104MHz	Extended (-40°C to +125°C)
AT25DF011-SSHNHR-B				
AT25DF011-XMHNHR-T	8X			
AT25DF011-XMHNHR-B				
AT25DF011-MAHNHR-T	8MA3			
AT25DF011-DWFHT [2]	DWF			

1. The shipping carrier option code is not marked on the devices.
2. Contact Adesto for mechanical drawing or Die Sales information.

Package Type	
8S1	8-lead, 0.150" Wide, Plastic Gull Wing Small Outline Package (JEDEC SOIC)
8X	8-lead, Thin Shrink Small Outline Package
8MA3	8-pad, 2 x 3 x 0.6mm, Thermally Enhanced Plastic Ultra Thin Dual Flat No Lead Package (UDFN)
DWF	Die in Wafer Form

3. Revision History

Revision Level – Release Date	History
A - September 2014	Initial release.
B - October 2014	Updated AC and DC specifications.
C - January 2015	Added DFN and wafer form ordering codes. Updated Vcc range.
D - November 2015	Removed preliminary package note. Corrected units specification for I_{cc3} and $t_{PE.}$
E- August 2017	Updated corporate address information.

Corporate Office

California | USA
Adesto Headquarters
3600 Peterson Way
Sanat Clara, CA 95054
Phone: (+1) 408.400.0578
Email: contact@adestotech.com

