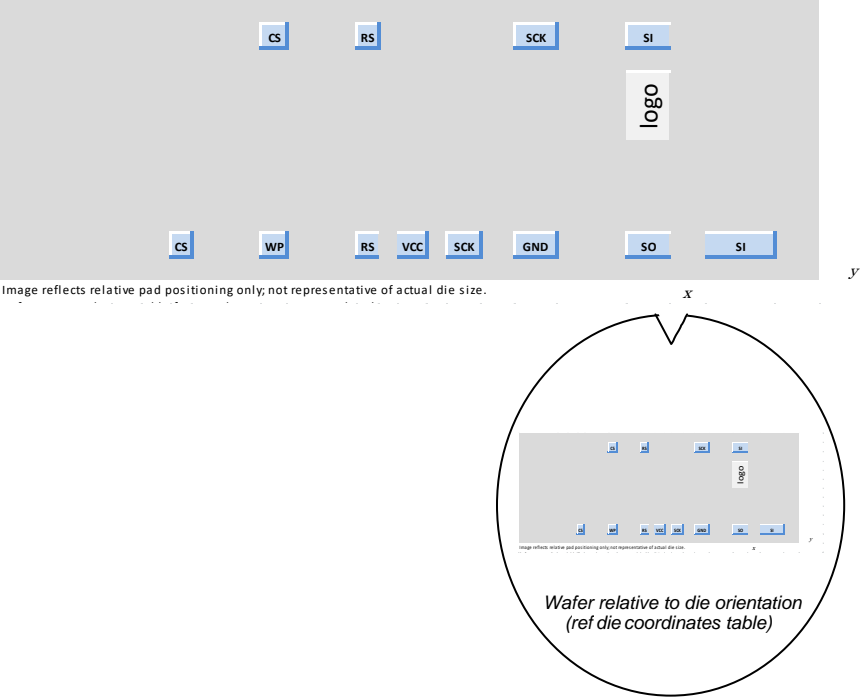


WAFER PRODUCT DATASHEET (ADDENDUM)

| Product | AT45DB161E-DWF | | |
|---------------------------------------|--|---------------|---------------|
| Description | 16 Mbit, DataFlash, 2.3V – 3.6V VCC | | |
| Die Map |  <p>Image reflects relative pad positioning only; not representative of actual die size.</p> <p>Wafer relative to die orientation (ref die coordinates table)</p> | | |
| Die Size & Pad Coordinates | | X (μm) | Y (μm) |
| | Die Size | 3230 | 2050 |
| | Scribe Line Width | 80 | 80 |
| | Die Step | 3310 | 2130 |
| | Pad Opening | 65 | 65 |
| | SI | 1096.72 | 921.84 |
| | SCK | 985.12 | 921.84 |
| | RSB | 293.42 | 921.89 |
| | CSB | 66.1 | 921.89 |
| | WPB | 175.52 | -922.85 |
| | VCC | 473.7 | -922.85 |
| | GND | 1207.74 | -922.35 |
| | SO | 1337.42 | -922.85 |
| | SI | 1471.78 | -922.85 |
| | CSB | 31.07 | -922.35 |
| | RSB | 355.94 | -922.85 |
| | SCK | 844.66 | -922.35 |

| Technical Details | |
|--|--|
| Adesto Product Family | DataFlash |
| Density | 16 Mbit |
| Operating Vcc | 2.3V - 3.6V |
| ESD | >2kV JESD22-A114 |
| Delivery Option | Wafer- unsawn |
| Wafer Size (mm) | 200 |
| Process Geometry (nm) | 110 |
| Die ID | 637F7 |
| Wafer Map | Electronic- text file |
| Manufacturing Facility | UMC |
| Wafer Thickness (µm) Maximum | 725 |
| Back Grind Options | None / Contact Adesto |
| Back Plane Connection | Floating / Not Required |
| Backside preparation / metallization | None |
| Bond wire qualified | AU <input checked="" type="checkbox"/> CU <input type="checkbox"/> AG <input type="checkbox"/> |
| Passivation Material | HDP oxide + SiON |
| Passivation Thickness (Å) | 21000 |
| Bond Pad Material | Ti/TiN/AlCu |
| Bond Pad Thickness (Å) | 6000 |
| Good Die per Wafer | Contact Adesto ¹ |
| Active Circuits underneath the bond pad | Yes |

¹ Average value; subject to change without notice.

| Part Number Ordering Code ² | Operating Temperature Range | Functional Specification |
|---|--------------------------------|---|
| AT45DB161E-DWF | -40°C to 85°C | http://www.adestotech.com/wp-content/uploads/doc8782.pdf |

² Handle product in accordance with UV and ESD precautions.

Adesto Technologies Corporation

3600 Peterson Way, Santa Clara, CA 95054 | phone: (408) 400-0578 fax: (408) 400-0721 | www.adestotech.com

©2017 Adesto Technologies. All rights reserved. Adesto, the Adesto logo & CBRAM are trademarks of Adesto Technologies Corporation.

| Revision Level – Release Date | History |
|-------------------------------|--|
| A – August 2015 | Initial release. |
| B – November 2015 | Updated wafer orientation in die map image. Added footnote on handling. |
| C – August 2017 | Updated address and contact information. |

Disclaimer: Adesto Technologies Corporation makes no warranty for the use of its products, other than those expressly contained in the Company's standard warranty which is detailed in Adesto's Terms and Conditions located on the Company's web site. The Company assumes no responsibility for any errors which may appear in this document, reserves the right to change devices or specifications detailed herein at any time without notice, and does not make any commitment to update the information contained herein. No licenses to patents or other intellectual property of Adesto are granted by the Company in connection with the sale of Adesto products, expressly or by implication. Adesto's products are not authorized for use as critical components in life support devices or systems.