If you are unable to view this message, click here.



January 2022

## **New 4GB and 8GB eMMC Solutions**

**The News:** Alliance Memory introduces two new industrial-grade embedded multi-media card (eMMC) solutions. For solid-state storage in consumer, industrial, and networking applications, the 4GB ASFC4G31M-51BIN and 8GB ASFC8G31M-51BIN each integrate NAND flash memory with an eMMC controller and flash transition layer (FTL) management software in a single 11.5 mm by 13 mm 153-ball FBGA package.

Parts Numbers: ASFC4G31M-51BIN and ASFC8G31M-51BIN

## **Key Specifications and Benefits:**

- Compliant with the JEDEC eMMC v5.1 industry standard to support features such as:
  - Boot operation
  - Replay protected memory block (RPMB)
  - Device health report
  - Field firmware updates
  - Power off notification
  - Enhanced strobe features for faster and more reliable operation
  - Write leveling
  - High-priority interrupt (HPI)
  - Secure trim/erase
  - High-speed HS200 and HS400 modes
- Backwards-compatible with eMMC v4.5 and v5.0
- Operate over an industrial temperature range of -40°C to +85°C
- Offer programmable bus widths of x1, x4, and x8
- NAND memory with internal LDO can be powered with a single 3V supply voltage
- The controller can be powered by 1.8V or 3V dual supply voltages

## **Target Applications:**

• Smart watches, tablets, digital TVs, set-top boxes, VR and AR headsets, digital cameras, infotainment, CCTV, surveillance, automation, point-of-sale systems and emerging embedded applications

**The Context:** For solid-state storage in consumer, industrial, and networking applications, Alliance Memory's new 4GB ASFC4G31M-51BIN and 8GB ASFC8G31M-51BIN eMMC solutions integrate NAND flash memory with an eMMC controller and flash transition layer (FTL) management software in a single 11.5 mm by 13 mm 153-ball FBGA package. For designers, the devices simplify designs for fast and easy system integration — speeding up product development and faster time to market — while saving space by eliminating the need for an external controller. In addition, the devices' FTL software provides high reliability and stable performance with wear levelling and bad block management.

Compliant with the JEDEC eMMC v5.1 industry standard, the eMMCs support a wide range of features such as boot operation; replay protected memory block (RPMB); device health report; field firmware updates; power off notification; enhanced strobe features for faster and more reliable operation; write leveling; high-priority interrupt (HPI); secure trim/erase; and high-speed HS200 and HS400 modes. The ASFC4G31M-51BIN and ASFC8G31M-51BIN are also backwards-compatible with eMMC v4.5 and v5.0.

Availability: Samples and production quantities of the eMMCs will be available in Q1 2022, with lead times of 12 weeks.

Link to product datasheets and Buy Now information: <a href="https://www.alliancememory.com/emmc/">https://www.alliancememory.com/emmc/</a> Link to product introduction video: <a href="https://youtu.be/a4LgvKF9gbw">https://youtu.be/a4LgvKF9gbw</a>

