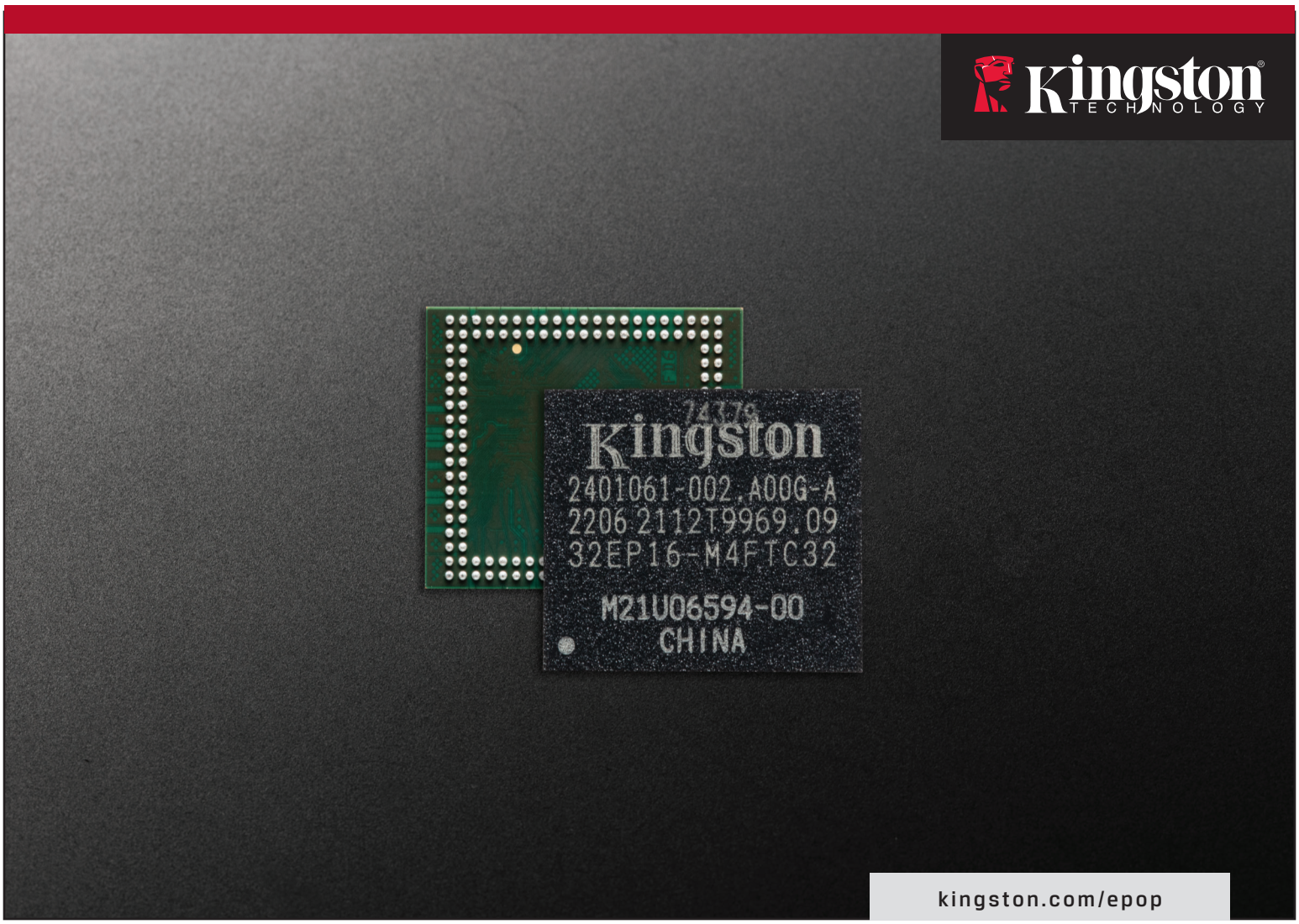

ePoP

Embedded Package-on-Package Memory for Wearables

Kingston's ePoP provides a highly integrated JEDEC standard component that combines Embedded MultiMedia Card (e•MMC) storage and Low-Power Double Data Rate (LPDDR) DRAM into a Package-on-Package (PoP) solution. ePoP is mounted directly on top of a compatible host System-on-a-Chip (SoC), which reduces Printed Circuit Board (PCB) space, and ensures optimum performance. ePoP is an ideal solution for space constrained applications such as wearables.

KEY BENEFITS

- By mounting directly on top of a host SoC, ePoP provides an ideal solution for small form factor applications such as wearables.
- Low-Power DRAM and optimized storage firmware reduces power consumption while delivering the high performance needed for battery powered wearable applications.
- Simplifies system design, reduces time to market, and shortens the qualification cycle.
- Multiple firmware configurations available to best fit your application requirements for performance, power, and life span.

MARKET SEGMENTS

IoT

Wearables

Augmented Reality (AR) / Virtual Reality (VR) devices

EPOP PART NUMBERS AND SPECIFICATIONS

LPDDR3 based ePoP

Part Number	Capacity		Description		Package	FBGA	Operating Temperature
	NAND (GB)	DRAM (Gb)	eMMC	DRAM	(mm)		
04EP04-N3GM627	4	4	5.0	LPDDR3	10x10x0.8	136	-25°C ~ +85°C
04EP08-N3GM627	4	8	5.0	LPDDR3	10x10x0.85	136	-25°C ~ +85°C
08EP08-N3GTC32*	8	8	5.1	LPDDR3	10x10x0.85	136	-25°C ~ +85°C
32EP08-N3GTC32	32	8	5.1	LPDDR3	10x10x0.85	136	-25°C ~ +85°C

LPDDR4x based ePoP

Part Number	Capacity		Description		Package	FBGA	Operating Temperature
	NAND (GB)	DRAM (Gb)	eMMC	DRAM	(mm)		
08EP08-M4ETC32*	8	8	5.1	LPDDR4x	8x9.5x0.8	144	-25°C ~ +85°C
08CP08-M4ETC32*	8	8	5.1	LPDDR4x	8x9.5x0.85	144	-25°C ~ +85°C
16EP08-M4ETC32	16	8	5.1	LPDDR4x	8x9.5x0.8	144	-25°C ~ +85°C
32EP08-M4ETC32	32	8	5.1	LPDDR4x	8x9.5x0.8	144	-25°C ~ +85°C
16EP16-M4FTC32	16	16	5.1	LPDDR4x	8x9.5x0.8	144	-25°C ~ +85°C
32EP16-M4FTC32	32	16	5.1	LPDDR4x	8x9.5x0.8	144	-25°C ~ +85°C
32CP16-M4FTC32	32	16	5.1	LPDDR4x	8x9.5x0.85	144	-25°C ~ +85°C

*pSLC mode for higher endurance