



[kingston.com/epop](http://kingston.com/epop)

## 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.

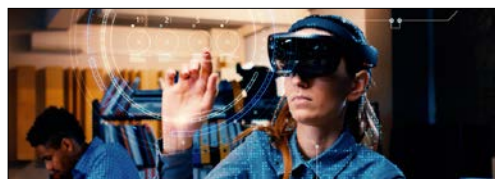
## MARKET SEGMENTS



IoT



Wearables



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

## EPOP PART NUMBERS AND SPECIFICATIONS

### LPDDR3 based ePoP

| Part Number     | Capacity  |           | Description |        | Package (mm) | FBGA | Operating Temperature |
|-----------------|-----------|-----------|-------------|--------|--------------|------|-----------------------|
|                 | NAND (GB) | DRAM (Gb) | eMMC        | DRAM   |              |      |                       |
| 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 (mm) | FBGA | Operating Temperature |
|-----------------|-----------|-----------|-------------|---------|--------------|------|-----------------------|
|                 | NAND (GB) | DRAM (Gb) | eMMC        | DRAM    |              |      |                       |
| 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

