## HYPERRAM Series Product Ultra-Low Power, Low Pin Count and Small Form Factor Solution

Winbond's HYPERRAM™ is optimized for wearable devices, smart home and AI/AIoT applications. It provides design simplicity, space saving, and low power operation while delivering the performance needed in these applications. The lower signal count reduces routing area, and HYPERRAM offers in small form factor packages, further reducing the design footprint. Package type available in WLCSP, 24 BGA, 49 BGA and Known Good Die.





with less active pins; without compromising performance



Density <sup>1</sup>	Voltage (V)²	Speed (Mbps)	I/O	Package Type³	Status <sup>4</sup>
32Mb	1.8 / 3.0	400	x8	TFBGA24	MP
64Mb	1.8 / 3.0	400	x8	WLCSP TFBGA24	MP
128Mb (DDP)	1.8 / 3.0	400	x8	TFBGA24	MP
128Mb	1.8	400	x8, x16	WLCSP WFBGA49	MP
256Mb	1.8 / 3.0	400	x8, x16	WLCSP TFBGA24 WFBGA49	MP
512Mb (DDP)	1.8 / 3.0	400	x8, x16	TFBGA24 WFBGA49	MP

- 1. See data sheet for further technical information. This is subject to change without notice.
- 2. For lower VDD 1.5V or 1.35V or 1.2V, please contact Winbond marketing.
- 3. All Winbond products are "Green", Halogen-Free and RoHS compliant packaging.
- 4. MP stands for mass production
- 5. Please visit www.winbond.com for additional information or questions about our products.



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