apmemory

RZ Ecosystem Partner Solution

AP Memory Octal SPI PSRAM Solutions

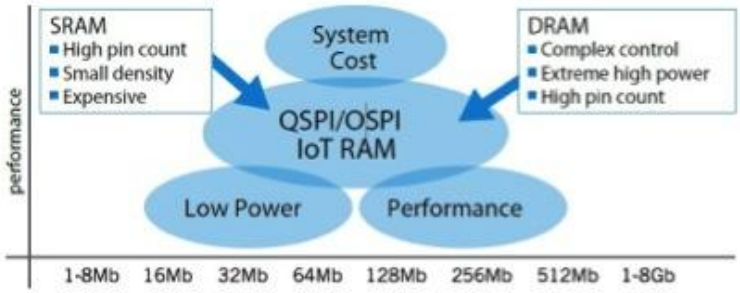
Solution Summary

AP Memory Octal PSRAM product family, as an alternative solution to standard parallel interface PSRAM and legacy DRAM, supports high bandwidth with low pin-count, low power consumption and cost-effective external memory, suitable to RZ family which requires larger high bandwidth memory to fulfill high performance, and real-time industrial application including embedded AI and audio/video pre-processing .

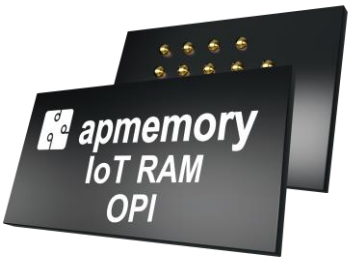
Features/Benefits

- Octal SPI PSRAM, up to 512Mb, 1.8V
  - High Bandwidth: PSRAM up to 400MB/s at 200MHz by Octal SPI Memory Interface
  - Lowest Pin Count: 11 signal pin only
  - Lowest Power (Halfsleep™): Standby current starting from 20uA typical at room temp.
  - Design Simplicity: Suitable for small size design, such as SMARC (82mmx50mm)

Diagrams/Graphics



PSRAM combines the high density of DRAM with the ease of use of on-chip SRAM.



AP Memory Octal SPI PSRAM are mounted on multiple Renesas Evaluation Board Kits, such as RZ/A2M, RZ/A3UL etc.

Target Markets and Applications

- Simple Camera
- Retail POS
- Simple HMI
- IoT Gateway/Controller
- Home Appliances
- Sound System
- Wearables
- Industrial Display
- Consumer Electronics

https://www.apmemory.com/zh-hant/products/psram-iot-ram

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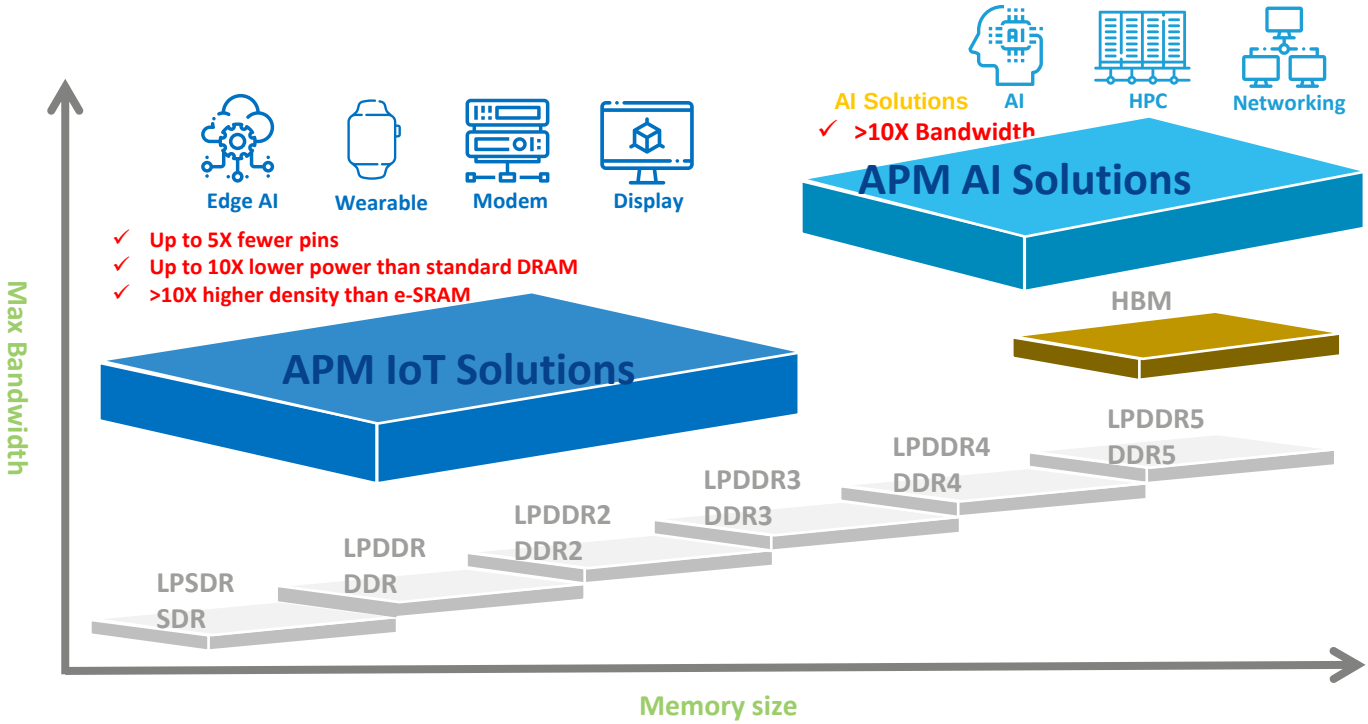

AP Memory, a Leading Provider of Low-Mid Size PSRAM/DRAM

AP Memory is a fabless DRAM and IP product company. As a world leader in Pseudo-SRAM, AP Memory delivers reliable solutions of low-pin-count, ultra-low-power IoT RAM and high-performance derivative products. AP Memory is also the world-leading company in AI memory solutions, particularly for 3D IC. The headquarters is based in Hsinchu, Taiwan, with R&D centers in the US, Mainland China, Taiwan, and sales offices worldwide. For more information, please visit www.apmemory.com and https://www.apmemory.com/applications/internet-of-things/