

# MACRONIX

## OctaBus™ Memory

### Concurrent Operation OctaFlash™

## Product Family

Macronix's OctaFlash UW/LW memory family features a multi-bank architecture with concurrent operation and densities ranging from 64Mb to 2Gb. This distinct architecture enables read access from one memory bank while simultaneously writing to another.

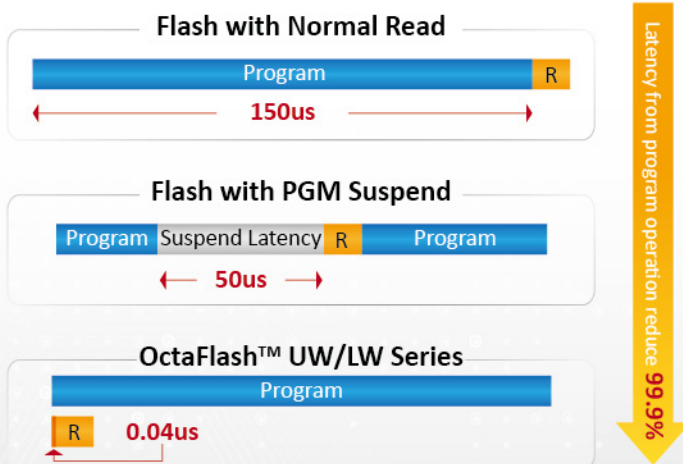
## Key Features

- Instant-on, high performance @ 400 MB/s throughput.
- Over-the-Air (OTA) update ready.
- High efficiency enabling read access from one memory bank while writing to another.
- Supports eXecution in Place (XiP) for large applications.
- Automotive Grade 1 (-40°C to +125°C)
- ECC for 1b-correction and 2b-detection for functional safety.
- Functional Safety ISO26262 ASIL B Compliant & ASIL D Ready.

Density	Voltage	Part Number
2Gb	1.8V	MX66UW2Gx45G
	3V	MX66LW2Gx45G
1Gb	1.8V	MX66UW1Gx45G
	3V	MX66LW1Gx45G
512Mb	1.8V	MX25UW51x45G
	3V	MX25LW51x45G
256Mb	1.8V	MX25UW25x45G
	3V	MX25LW25x45G
128Mb	1.8V	MX25UW12x45G
	3V	MX25LW12x45G
64Mb	1.8V	MX25UW6x45G

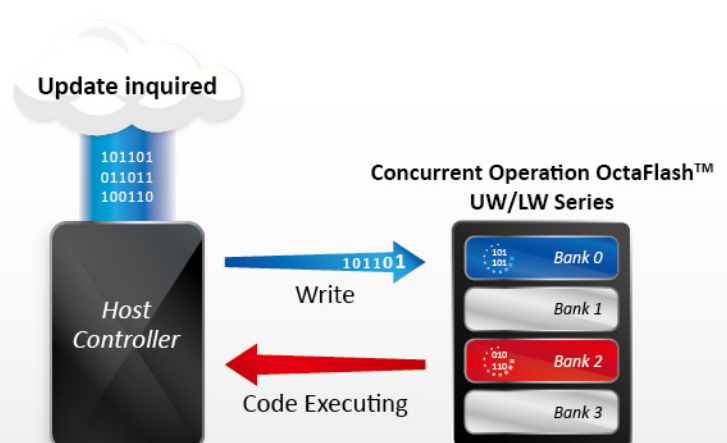
## Benefits for XiP operation :

- Reduce data write latency over 99%.
- Enhance power consumption by improving CPU efficiency.



## Benefits for OTA update:

- No system downtime. Updates can be carried out while application is actively running from flash.
- Partitions for keeping firmware roll back capability.



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