

Memory Products with ECC











DRAM	1Gb	2Gb	4Gb	8Gb
1.35V & 1.5V DDR3/DDR3L	☑ ECC		☑ ECC, ASIL-B	ECC
Mobile DRAM		2Gb	4Gb	8Gb
1.1V (1.8V) LPDDR4/LPDDR4x		ECC	☑ ECC	☑ ECC

Flash



SPI/QPI	128Mb	256Mb	512Mb	1Gb	
	☑ ECC	☑ ECC	☑ ECC	☑ ECC	
Octal (xSPI)	64Mb	128Mb	256Mb	512Mb	
	ECC	ECC	☑ ECC	☑ ECC	
Serial SLC NAND	1Gb	2Gb	4Gb	8Gb	
3V/1.8V	☑ 1bit ECC	☑ 1bit ECC	☑ 8bit ECC	₹ 8bit ECC	
SLC NAND	1Gb	2Gb	4Gb	8Gb	
3V/1.8V; x8/x16	☑ 1 or 4bit ECC	☑ 1 or 4bit ECC	☑ 1 or 4 or 8bit ECC	☑ 1 or 4 or 8bit ECC	

SRAM



Asynchronous SRAM	1Mb	2Mb	4Mb	8Mb	16Mb	128Mb
High Speed Asynchronous	☑ ECC	☑ ECC	☑ ECC	☑ ECC	☑ ECC	
Ultra Low Power			☑ ECC	☑ ECC		
OctalRAM						$\overline{\mathbf{V}}$

UCTAIRAM					1bit ECC	
Synchronous SRAM			4Mb	8Mb		
Standard/No-Wait(ZBT)						
Synchronous			ECC	ECC		

Industrial/Automotive Temperature, Long Term Support

ECC: On-chip Error Correcting Code is an available option **ASIL-B**: Certified to ASIL-B safety standard

On-chip Error Correcting Code (ECC)

ISSI memory with built-in ECC (Error Correcting Code) is backward compatible with standard memory. These products offer the advantages of greatly enhancing data robustness and quality, but simplifying system design, saving power, and reducing the memory footprint on the board. It is a good fit for hi-rel systems. Safety is especially important in many applications in the automotive electronics segment, and by using ISSI memory with on-chip ECC, it helps automotive system designers to achieve the functional safety requirements defined by ISO 26262.