

Continue


```
#define SYS_SDRAM_SIZE 0x40000000
#define PHYS_SDRAM 0x40000000
#resize DRAM here
#define PHYS_SDRAM_SIZE 0xC0000000 # 3GB DDR1
#define PHYS_SDRAM_SIZE 0x100000000 # 4GB DDR1
#define CONFIG_NR_DRAM_BANKS 1
```

NXP Semiconductors Document Number: **IMX8MDQ1QIEC**
Data Sheet: Technical Data Rev. 1.1, 07/2019



i.MX 8M Dual / 8M QuadLite / 8M Quad Applications Processors Data Sheet for Industrial Products



Ordering information
See Table 2 on page 8

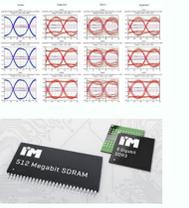
1 i.MX 8M Dual / 8M QuadLite / 8M Quad introduction

The i.MX 8M Dual / 8M QuadLite / 8M Quad processors represent NXP's latest generation of low-power, embedded applications processors, designed for use in a wide range of applications, from low-power devices to high-performance, low-power processors.

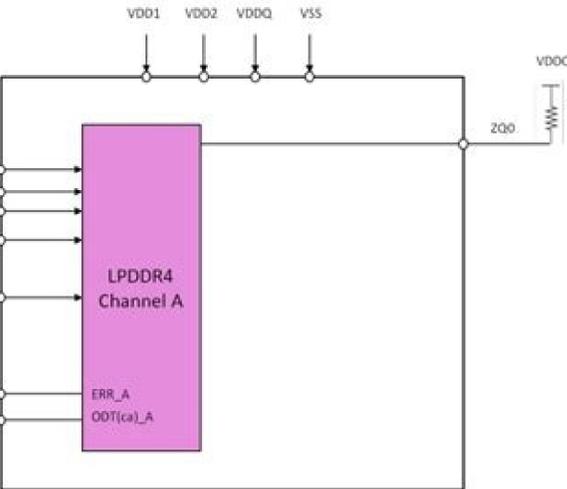
The i.MX 8M Dual / 8M QuadLite / 8M Quad processors feature a streamlined implementation of a quad ARM® Cortex-A53 core, which operates at speeds of up to 1.3 GHz. A general-purpose Cortex-M7 core processor is for low-power processing. The DRAM controller supports 32-bit LPDDR4, DDR4, and DDR3L memory. The on-chip cache hierarchy includes L1, L2, and L3 caches, which are used to improve performance. The i.MX 8M Dual processor has hardware acceleration for video playback up to 4K, and can drive the video output up to 60 fps. Although the i.MX 8M QuadLite processor does not have hardware acceleration for video decode, it allows for video playback with a frame decoder if needed.

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NOT RECOMMENDED FOR NEW DESIGN. THIS PRODUCT IS OBSOLETE. SEE THE RECOMMENDED PART NUMBER FOR THE LATEST REVISION.



Part number: AS4C128M16MD4, AS4C256M16MD4



Lpddr4 sdrdam vs ddr4. Lpddr4 vs sdrdam.

Serial NOR Flash (QSPI, SPI) Den Part Number Buy Type Vcc Frequency Temp. Range Package Type Status Models Alt. Version/Doc 512K IS25LQ512B Multi I/O Quad SPI 2.3-3.6V 33M/104Mhz -40 to 125°C SOIC.TSSOP.WSON.VV50P.USON Prod IBIS/Verilog IS25CD512 1M IS25LP010E Multi I/O Quad SPI 2.3-3.6V 50M/104Mhz -40 to 125°C SOIC.TSSOP.WSON.VV50P.USON Prod IBIS/Verilog IS25LQ020B IS25WP020E Multi I/O Quad SPI 1.70-1.95V 50M/104Mhz -40 to 125°C SOIC.USON Prod IBIS/Verilog IS25W0200 IS25W0200 Multi I/O Quad SPI 1.70-1.95V 50M/104Mhz -40 to 125°C SOIC.USON Prod IBIS/Verilog IS25LQ040B IS25WP040E Multi I/O Quad SPI 1.70-1.95V 50M/104Mhz -40 to 125°C SOIC.USON Prod IBIS/Verilog IS25W0400 IS25W0400 Multi I/O Quad SPI 1.70-1.95V 50M/104Mhz -40 to 125°C SOIC.USON Prod IBIS/Verilog IS25LQ080B IS25WP080E Multi I/O Quad SPI 1.65-1.95V 50M/133Mhz -40 to 125°C SOIC.USON Prod IBIS/Verilog IS25W0800 IS25W0800 Multi I/O Quad SPI 1.65-1.95V 50M/133Mhz -40 to 125°C SOIC.USON Prod IBIS/Verilog IS25LQ160B IS25WP160E Multi I/O Quad SPI 1.65-1.95V 50M/133Mhz -40 to 125°C SOIC.USON Prod IBIS/Verilog IS25W1600 IS25W1600 Multi I/O Quad SPI 1.65-1.95V 50M/133Mhz -40 to 125°C SOIC.USON Prod IBIS/Verilog IS25LQ32B IS25WP32E Multi I/O Quad SPI 1.65-1.95V 50M/133Mhz -40 to 125°C SOIC.USON Prod IBIS/Verilog IS25W3200 IS25W3200 Multi I/O Quad SPI 1.65-1.95V 50M/133Mhz -40 to 125°C SOIC.USON Prod IBIS/Verilog IS25LQ64B IS25WP64E Multi I/O Quad SPI 1.65-1.95V 50M/133Mhz -40 to 125°C SOIC.USON Prod IBIS/Verilog IS25W6400 IS25W6400 Multi I/O Quad SPI 1.65-1.95V 50M/133Mhz -40 to 125°C SOIC.USON Prod IBIS/Verilog IS25LQ128B IS25WP128E Multi I/O Quad SPI 1.65-1.95V 50M/133Mhz -40 to 125°C SOIC.USON Prod IBIS/Verilog IS25W12800 IS25W12800 Multi I/O Quad SPI 1.65-1.95V 50M/133Mhz -40 to 125°C SOIC.USON Prod IBIS/Verilog IS25LQ256B IS25WP256E Multi I/O Quad SPI 1.65-1.95V 50M/133Mhz -40 to 125°C SOIC.USON Prod IBIS/Verilog IS25W25600 IS25W25600 Multi I/O Quad SPI 1.65-1.95V 50M/133Mhz -40 to 125°C SOIC.USON Prod IBIS/Verilog IS25LQ512B IS25WP512E Multi I/O Quad SPI 1.65-1.95V 50M/133Mhz -40 to 125°C SOIC.USON Prod IBIS/Verilog 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