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# LS1027ASN7PQA(Active)

QorIQ® Layerscape 1028A Industrial Applications Processor

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Package **FBGA448** FBGA448, fine-pitch ball grid array package, 448 terminals, 0.75 mm pitch, 17 mm x 17 mm x 2.46 mm body



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## Buy Options

LS1027ASN7PQA  
935392919557  
Active  
TRAY-Tray, Bakeable, Multiple in Drypack

Min. Package Quantity: 90

Lead Time: 18 weeks

1K @ US  
▾

Available Distributors: LS1027ASN7PQA

## Operating Characteristics

| Parameter                       | Value                  |
|---------------------------------|------------------------|
| Silicon Rev                     | Rev 1                  |
| Family                          | QorIQ LS1028A          |
| Development Tools               | LS1028A-RDB            |
| Qualification tier              | Industrial             |
| Core Type                       | Arm Cortex-A72         |
| Core: Number of cores (SPEC)    | 2                      |
| Operating Frequency [Max] (MHz) | 1500                   |
| L2 Cache (Max) (KB)             | 1024                   |
| SRAM (kB)                       | 256                    |
| External Memory Supported       | DDR3L SDRAM,DDR4 SDRAM |
| DRAM frequency (max)(MHz)       | 1600                   |
| Serial Audio Interface (SAI)    | 6                      |
| I <sup>2</sup> S                | 6                      |

| Parameter                              | Value        |
|----------------------------------------|--------------|
| SPI                                    | 3            |
| UART                                   | 8            |
| I <sup>2</sup> C                       | 8            |
| USB Controllers                        | 2            |
| PCIe                                   | 2            |
| PCIe version                           | PCIe 3.0     |
| SATA                                   | 1 x SATA 3.0 |
| Encryption                             | N            |
| Watchdog timer                         | Y            |
| Timers                                 | 8            |
| Debug & Trace                          | JTAG         |
| Junction Temperature (Min to Max) (°C) | 105 to 0     |

## Environmental Information

| Material Declaration         | PbFree | EU RoHS | Halogen Free | RHF Indicator | REACH SVHC | Weight (mg) |
|------------------------------|--------|---------|--------------|---------------|------------|-------------|
| LS1027ASN7PQA( 935392919557) | Yes    | Yes     | Yes          | D             | REACH SVHC | 1103.9      |

## Quality Information

| Material Declaration          | Safe Assure Functional Safety | Moisture Sensitivity Level (MSL) | Peak Package Body Temperature (PPT) (C°) | Maximum Time at Peak Temperatures (s) |
|-------------------------------|-------------------------------|----------------------------------|------------------------------------------|---------------------------------------|
|                               |                               | Lead Free Soldering              | Lead Free Soldering                      | Lead Free Soldering                   |
| LS1027ASN7PQA ( 935392919557) | No                            | 3                                | 260                                      | 40                                    |

## Shipping Information

| Part Number                   | Harmonized Tariff (US) <a href="#">Disclaimer</a> | Export Control Classification Number (US) |
|-------------------------------|---------------------------------------------------|-------------------------------------------|
| LS1027ASN7PQA ( 935392919557) | 854231                                            | 3A991A1                                   |

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