

# S32G234MABK0VUCT

## Active

Fully qualified to meet NXP quality and reliability requirements. Available for production quantity orders.

## Features

S32G234M Arm Cortex-M7, HSE, LLCE, PFE, PCIe, 20x CAN FD, 4x GbE - Vehicle Network Processor.

[Data Sheet](#)

[Product Summary](#)

[Tools and Software](#)

[Documentation](#)

## Package

### FBGA525

FBGA525, plastic, fine-pitch ball grid array package; 525 terminals; 0.8 mm pitch; 19 mm x 19 mm x 1.97 mm body.



[Buy Options](#) | [Operating Features](#) | [Environmental](#) | [Quality](#) | [Shipping](#) | [Product Change Notice](#)

## Buy Options

### S32G234MABK0VUCR

12NC: 935419846518

#### Active

10K @ US

**\$33.28**

[BUY FROM DISTRIBUTOR](#)

**Packing:** REEL-Reel 13" Q1/T1 in Drypack

**Min. Package Quantity:** 500

**Min. Order Quantity:** 500

**Lead Time:** 26

> Available Distributors: [S32G234MABK0VUCR](#)

### S32G234MABK0VUCT

12NC: 935419846557

#### Active

10K @ US

**\$33.28**

[BUY FROM DISTRIBUTOR](#)

**Packing:** TRAY-Tray, Bakeable, Multiple in Drypack

**Min. Package Quantity:** 84

**Min. Order Quantity:** 420

**Lead Time:** 26

> Available Distributors: [S32G234MABK0VUCT](#)

## Operating Features

| Parameter                       | Value   |
|---------------------------------|---|
| Core Type                       | 3 x Arm Cortex-M7   |
| Lockstep                        | Dual-Core   |
| Operating Frequency [Max] (MHz) | 400   |
| RAM (kB)                        | 8000  |
| Standby RAM                     | 32768   |
| External Memory Supported       | QSPI NOR,SD3.0/eMMC5.1 NAND   |
| Serial Communication            | 1 x PCIe 2.0, 10 x SPI, 2 x FlexRay, 3 x UART, 5 x I <sup>2</sup> C |
| LIN                             | 4   |
| Flexray                         | 2   |
| CAN                             | 16  |
| CAN FD                          | 4   |
| Ethernet MACs                   | 4   |
| Ethernet Type                   | MII, RGMII, RMII, SGMII   |

| Parameter                                       | Value                      |
|---|----------------------------|
| PCIe  | 1 x PCIe 2.0               |
| Security Modules                                | HSE-H                      |
| Hardware Isolation                              | XRDC                       |
| Timer   | 7 x WDT x 32, 8 x STM x 32 |
| PWM [Number, bits]                              | 6 x 32                     |
| ADC [Number, bits]                              | 12 x 12                    |
| JTAG Debug                                      | Y                          |
| Aurora Trace                                    | Y                          |
| Supply Voltage [Min to Max] (V)                 | 0.8 to 3.45                |
| Ambient Operating Temperature (Min to Max) (°C) | -40 to 105                 |
| Junction Temperature (Min to Max) (°C)          | -40 to 125                 |
| ASIL Certification                              | up to ASIL-D               |
| AEC-Q100 Temperature Range                      | grade 2                    |

## Environmental

| Part/12NC  | Pb-Free | EU RoHS  | Halogen Free | RHF Indicator | REACH SVHC                 | Weight (mg) |
|--|---------|--|--------------|---------------|----------------------------|-------------|
| <a href="#">S32G234MABK0VUCR</a><br>(935419846518) | Yes     | Yes<br><a href="#">Certificate Of Analysis (CoA)</a> | Yes          | D             | <a href="#">REACH SVHC</a> | 2495.77     |
| <a href="#">S32G234MABK0VUCT</a><br>(935419846557) | Yes     | Yes<br><a href="#">Certificate Of Analysis (CoA)</a> | Yes          | D             | <a href="#">REACH SVHC</a> | 2495.77     |

## Quality

| Part/12NC  | 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                   |
| <a href="#">S32G234MABK0VUCR</a><br>(935419846518) | ISO 26262                     | 3                                | 260                                      | 40                                    |
| <a href="#">S32G234MABK0VUCT</a><br>(935419846557) | ISO 26262                     | 3                                | 260                                      | 40                                    |

## Shipping

| Part/12NC  | Harmonized Tariff (US) <a href="#">Disclaimer</a> | Export Control Classification Number (US) |
|--|---|---|
| <a href="#">S32G234MABK0VUCR</a><br>(935419846518) | 854231  | 5A992C                                    |
| <a href="#">S32G234MABK0VUCT</a><br>(935419846557) | 854231  | 5A992C                                    |

## Product Change Notice

| Part/12NC  | Issue Date | Effective Date | PCN                       | Title  |
|--|------------|----------------|---------------------------|--|
| <a href="#">S32G234MABK0VUCR</a><br>(935419846518) | 2021-08-13 | 2021-08-14     | <a href="#">202108010</a> | S32G2 Mask Set 0P77B Errata Update to Revision 2.1   |
| <a href="#">S32G234MABK0VUCT</a><br>(935419846557) |            |                |                           |  |
| <a href="#">S32G234MABK0VUCR</a><br>(935419846518) | 2021-05-06 | 2021-05-07     | <a href="#">202104059</a> | S32G2x Data Sheet Update from Rev2.1 to Rev3 and Reference Manual Update from Rev2 to Rev3 |
| <a href="#">S32G234MABK0VUCT</a><br>(935419846557) |            |                |                           |  |