The following document contains information on Cypress products. Although the document is marked with the name “Spansion”, the company that originally developed the specification, Cypress will continue to offer these products to new and existing customers.

**Continuity of Specifications**
There is no change to this document as a result of offering the device as a Cypress product. Any changes that have been made are the result of normal document improvements and are noted in the document history page, where supported. Future revisions will occur when appropriate, and changes will be noted in a document history page.

**Continuity of Ordering Part Numbers**
Cypress continues to support existing part numbers. To order these products, please use only the Ordering Part Numbers listed in this document.

**For More Information**
Please contact your local sales office for additional information about Cypress products and solutions.

**About Cypress**
Cypress (NASDAQ: CY) delivers high-performance, high-quality solutions at the heart of today’s most advanced embedded systems, from automotive, industrial and networking platforms to highly interactive consumer and mobile devices. With a broad, differentiated product portfolio that includes NOR flash memories, F-RAM™ and SRAM, Traveo™ microcontrollers, the industry’s only PSoC® programmable system-on-chip solutions, analog and PMIC Power Management ICs, CapSense® capacitive touch-sensing controllers, and Wireless BLE Bluetooth® Low-Energy and USB connectivity solutions, Cypress is committed to providing its customers worldwide with consistent innovation, best-in-class support and exceptional system value.
The Spansion® Traveo™ MCU family S6J3200 features 32-bit RISC microcontrollers with an ARM® Cortex®-R5 core and operates at 240MHz. This microcontroller comes with highly-efficient 2D/3D graphic engines with advanced feature-sets for memory savings, safety and high image quality to help manufacturers take advantage of the lower overall system costs while meeting the increasingly high levels of performance and quality that industrial, consumer and automotive applications demand. In addition, this microcontroller offers support for Spansion HyperBus™ memory interface, a breakthrough that dramatically improves read performance while reducing the number of pins. This microcontroller comes with Ethernet AVB, CAN-FD, a high-speed communication protocol compatible with the conventional CAN, and SHE(Secure Hardware Extension) as security function.

1. FEATURES

- **System**
  - 32bit ARM Cortex-R5F CPU core at up to 240MHz
  - General purpose I/O port : up to 120
  - 12-bit A/D converter : up to 50 channels
  - External interrupt : up to 16 channels
  - Base timer : up to 24 channels
  - 32-bit free-run timer : up to 12 channels
  - Built-in CR oscillator
  - Real-time clock
  - Input capture unit : up to 24 channels
  - Output compare unit : up to 24 channels
  - DMA controller : 16 channels
  - Stepper motor controller (SMC): 6 Units
  - JTAG debug interface

- **Graphics and Display**
  - 2D graphic engine
  - 3D graphic engine (optional)
  - Timing generator + TCON
  - TTL/RSDS
  - FPD-Link – LVDS (optional)
  - Video capture
  - Communication: Ethernet AVB MAC
  - CAN-FD : up to 4 channels
  - Multi-function serial interface : up to 12 channels, selectable protocol: UART, CSI0, LIN and I²C
  - MediaLB : up to 1 channel

- **Memory**
  - Spansion HyperBus™ Memory interface
  - Dual quad double data rate SPI Flash Interface

- **Multimedia**
  - I²S input/output: up to 2 Units
  - PCM to PWM output unit
  - Sound mixer (optional): 1 unit x 10 inputs
  - Stereo audio DAC (optional)

- **Security and Safety**
  - Secure Hardware Extension - SHE
  - Safety features, such as MPU, TPU, ECC and others
  - CRC generator: 1 channel
  - Watchdog timer with window function
  - Low voltage detector
  - Clock supervisor for all source clocks

2. PRODUCT LINEUP

<table>
<thead>
<tr>
<th>Parameter</th>
<th>S6J323CxSA</th>
<th>S6J324CxSA</th>
<th>S6J325CxSA</th>
<th>S6J326CxSA</th>
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<tr>
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3. ORDERING INFORMATION

<table>
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<tr>
<th>Part number</th>
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<tr>
<td>S6J324CKSASEx0000</td>
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<tr>
<td>S6J326CKSASEx0000</td>
<td>Plastic • TEQFP(0.0mm pitch)</td>
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<tr>
<td>S6J324CLSASEx0000</td>
<td>Plastic • TEQFP(0.4mm pitch), 216pin</td>
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<td>S6J326CLSASEx0000</td>
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4. PACKAGE EXAMPLE OF REFERENCE

Plastic TEQFP-208
5. BLOCK DIAGRAM

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