# 32-bit Microcontroller Traveo Family Fact Sheet

The Traveo™ family S6J3110, features 32-bit RISC microcontrollers with an ARM® Cortex®-R5 core and operate at 144MHz.4 MB of Flash memory can correspond also to the software capacity which will increase in the future.First Body application MCU with CAN-FD as a communication interface. CAN-FD is compatible with the conventional CAN and it can shorten the time of reprograming by high-speed communication.Moreover,this miocrocontroller has SHE(Secure Hardware Extension) as security function. It will prevent the extractraction and alteration of the data or keys. This microcontroller can control safely and quickly the circumference function of Body in which an increase will be expected from now on.

Features

- 32bit ARM® Cortex®-R5 CPU Core
- Clock
  - Maximum clock frequency: 144MHz, 96MHz*
- DMA controller: 16 channels
- External interrupt: 16 channels
- Base timer: 30 channels
- 32-bit free-run timer: 6 channels
- 32-bit input capture: 12 channels
- 32-bit output compare: 12 channels
- 12-bit A/D converter: 64, 56* channels (2 units total)
- Real Time Clock
- Multi-function serial interface: 22, 4* channels, Selectable from UART/CSIO/LIN/I2C
- CAN-FD(192msb[reception]): 2, 1* channels
- Exclusion access memory
- Watchdog timer: 1 channel(SW)+1 channel(HW)
- CRC generation: 1 channel
- Secure Hardware Extension
- General Purpose I/O port: 150, 116*
- Built-in CR oscillator
- Debug interface
  - JTAG Debug Port
- Partial-wakeup function
- Low Voltage Detector
- Clock Supervisor
- Power Supply: 1 power voltage(5V)
* Spec for S6J311AHxB, S6J3119HxB, S6J3118HxB

Package Example of Reference
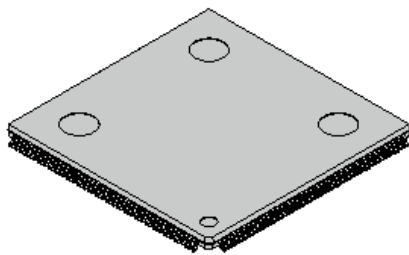
Plastic・TEQFP176,176pin

Product Lineup

Parameter \ Part number	S6J311ExxB	S6J311DxxB	S6J311CxxB	S6J311BxxB
Main Flash(Byte)	4096K+64K	3072K+64K	2048K+64K	1536K+64K
Work Flash(Byte)	112K	112K	112K	112K
RAM(Byte)	320K	256K	192K	128K
Backup RAM(Byte)	64K	64K	64K	64K

Parameter \ Part number	S6J311AHxB	S6J3119HxB	S6J3118HxB
Main Flash(Byte)	1024K+64K	768K+64K	512K+64K
Work Flash(Byte)	48K	48K	48K
RAM(Byte)	80K	64K	48K
Backup RAM(Byte)	8K	8K	8K

Ordering Information

Part number	Package
S6J311EJABSEx0000	Plastic TEQFP(0.5mm pitch), 176pin
S6J311DJABSEx0000	
S6J311CJABSEx0000	
S6J311BJABSEx0000	
S6J311EHABSEx0000	Plastic TEQFP(0.5mm pitch), 144pin
S6J311DHABSEx0000	
S6J311CHABSEx0000	
S6J311BHABSEx0000	
S6J311AHABSEx0000	Plastic TEQFP(0.5mm pitch), 144pin
S6J3119HABSEx0000	
S6J3118HABSEx0000	
S6J311EJBBSEx0000	Plastic TEQFP(0.5mm pitch), 176pin
S6J311DJBBSEx0000	
S6J311CJBBSEx0000	
S6J311BJBBSEx0000	
S6J311EHBBSEx0000	Plastic TEQFP(0.5mm pitch), 144pin
S6J311DHBBSEx0000	
S6J311CHBBSEx0000	
S6J311BHBBSEx0000	
S6J311AHBBSEx0000	Plastic TEQFP(0.5mm pitch), 144pin
S6J3119HBBSEx0000	
S6J3118HBBSEx0000	

Block Diagram

Block Diagram of S6J311ExxB,S6J311DxxB,S6J311CxxB,S6J311BxxB
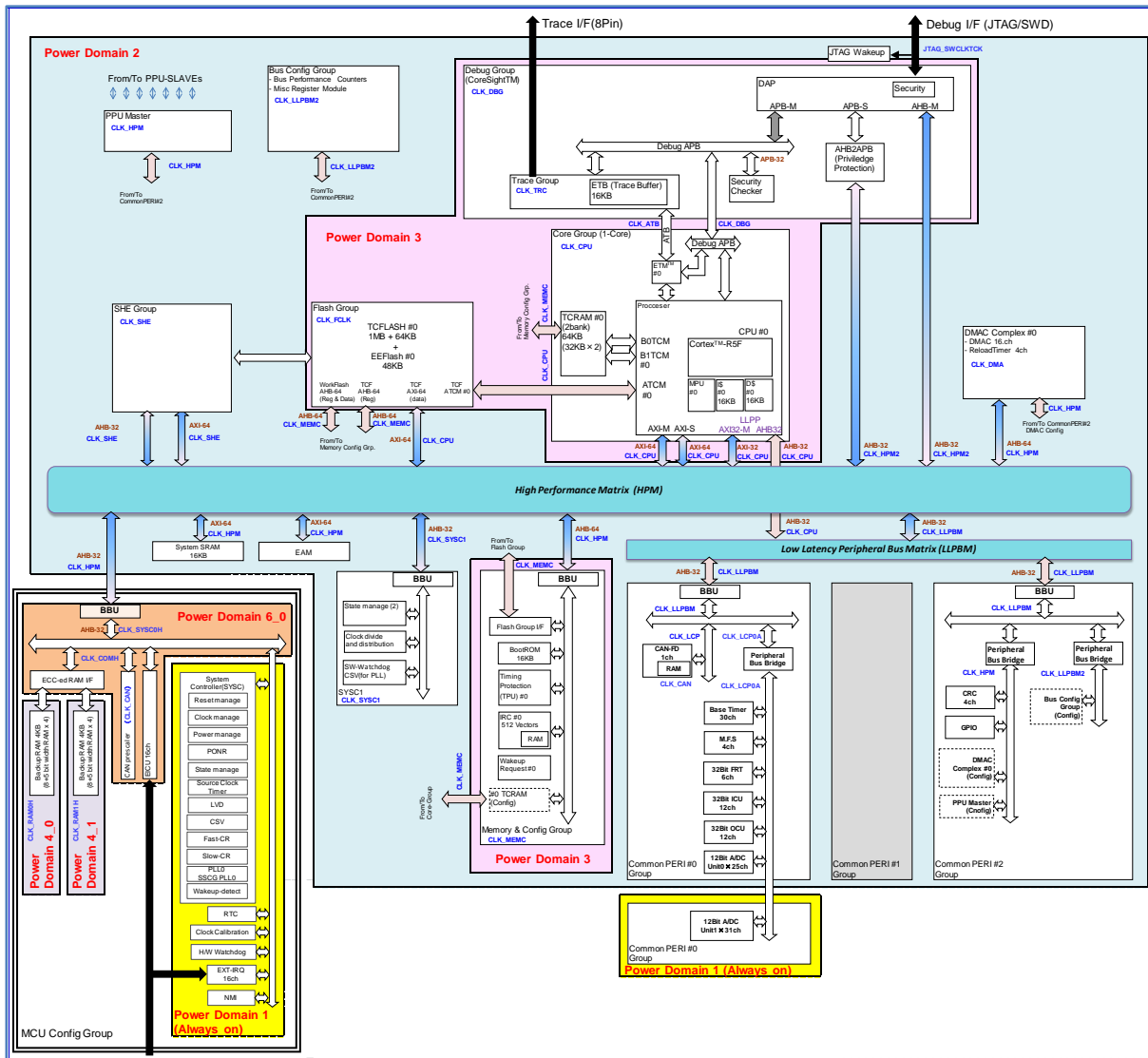
Document History

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Revision	ECN	Orig. of Change	Submission Date	Description of Change
**	—	NNAK	11/14//2014	Migrated to Cypress and assigned document number 002-08974. No change to document contents or format.
*A	5159031	HIOT	03/04/2016	Updated to Cypress template Added SHE-OFF option and updated revision

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