![Chipsmall logo]

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!

Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832
Email & Skype: info@chipsmall.com Web: www.chipsmall.com
Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China
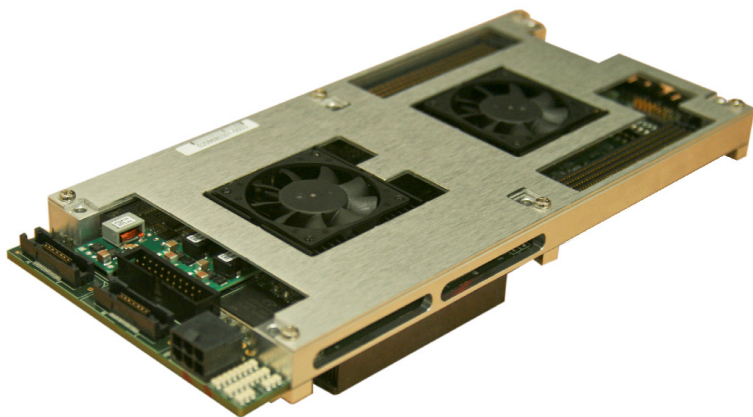
The Versatile™ *Express* family development boards provide an excellent environment for prototyping the next generation of system-on-chip designs. Through a range of plug-in options, hardware and software application can be developed and debugged.

The Soft Macro Model for the ARM® Cortex™-R7 processor is an encrypted FPGA image for use on the LogicTile™ *Express* (LTE) 13MG. It offers:

- Early Access to the Cortex-R7 processor
- Benchmarking capability
- Early device driver and software development
- User IP proving via second FPGA board
- ARM JTAG and Trace connectors for debug support

LogicTile Express 13MG with ARM Cortex-R7 SMM

The implementation uses standard ARM PrimeCell® and fabric components to implement a basic SoC design to mimic the TestChip developments of our CoreTile™ *Express* products.

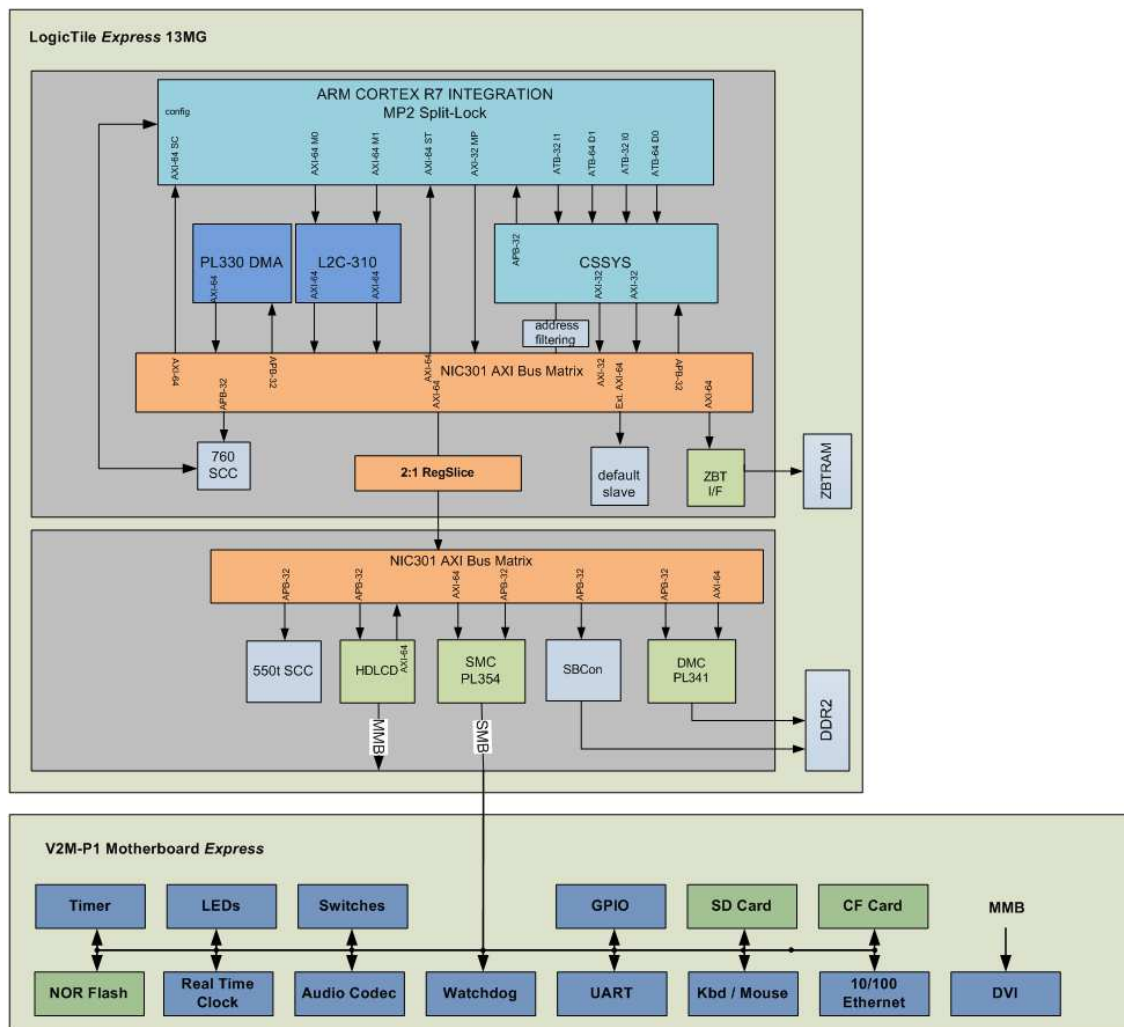A simple click through EULA allows access to the latest processor technology from ARM.

Features

- Processor Subsystem
  - Dual Cortex-R7 with FPU r0p0
  - L1 Cache 16KB Instr and 16KB Data
  - TCM 64KB
  - CoreSight™ support ETM
- AMBA® AXI™ Subsystem
  - PL341 DDR2 memory interface
    - SODIMM 2GB 64bit @ 125MHz
  - PL354 Static Memory Bus Interface
    - 32bit 48MHz to motherboard
  - Boot from NOR Flash on motherboard
  - HDCLD video controller
- Peripheral set compatible with Versatile family
- Debug
  - ARM JTAG
  - ARM 32-bit parallel trace
- Simplified Configuration
  - USB flash drive to PC
  - Fast programming and configuration
  - Configuration files for system settings
  - Automated/remote operation

Deliverables

- LTE 13MG with encryption key
- Encrypted SMM image for LTE 13MG
- 4GB DDR2 SODIMM
- Versatile *Express* SMM support CD/DVD
- Example AMBA AXI design
- SelfTest Software

LogicTile *Express* for ARM Cortex-R7 Architecture

LogicTile Express 13MG architecture diagram

When connected to a Versatile *Express* motherboard the configuration system enables programming and updating of the SMM *Express* R7x2. Configuration and operation parameters of the daughterboard are defined in a configuration file stored on the motherboard.

The daugherboard communicates to the motherboard via the static memory interface for all peripheral and flash memory accesses.

PART NUMBER: V2S-CR7-1000A

www.arm.com/ve