ADSP-SC573

Dual-core SHARC+ (w/768KB L1), ARM Cortex-A5, 1MB Shared L2, DDR, Gigabit Ethernet, USB, SDIO, 400-cspBGA

Pre-Release

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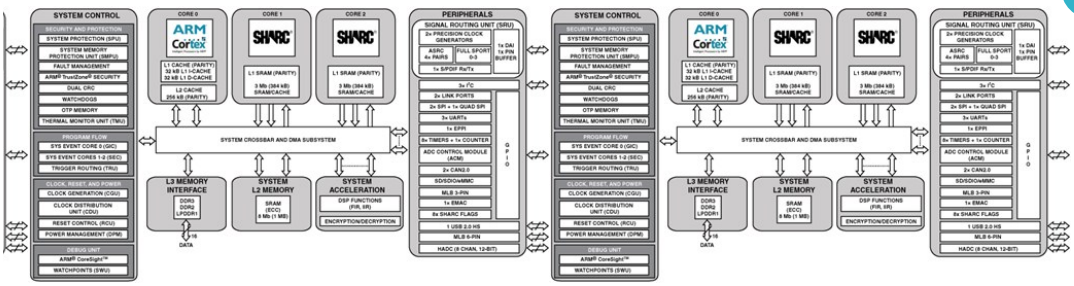

PDF **Data Sheet Rev. PrC**

中文数据手册

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IBS **IBIS Models**

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Features and Benefits

Single-chip SOC Providing Optimized BOM Cost and Board Area Design

- Integrated dual SHARC+ floating-point DSP cores and ARM® Cortex®-A5 processor
- Scalable performance and features
- Lower cost derivative to the successful ADSP-SC58x family

Class leading low power floating-pt DSP Performance at under 2W

- 5.4GFLOPs, 1.8GMACS Floating-pt SHARC+ DSP performance (2x 450MHz)
- Enabling 105°C environments and reduced heat-sinks and no fans for increased reliability & robustness

Integrated & optimized low power connectivity engine

- Industry standard ARM® Cortex®-A5 (7

… Show More..

Product Categories

Processors & DSP

- SHARC Processors

For samples of the ADSP-SC573, order ADSP-SC573-BCZENG. Please contact your local ADI sales or distributor office.
ADSP-SC57x and ADSP-2157x Series: Summary and Comparison

Product Details

The ADSP-SC57x/2157x processors are part of the new, high-performance, power-efficient, real-time series that delivers using two enhanced SHARC+® cores and advanced DSP accelerators (FIR, IIR). The ADSP-SC57x/ ADSP-2157x series consume less than 2 watts, making the new processor line-up more than 5x more power efficient than previous SHARC products and comparable to the ADSP-SC58x/ 2158x SHARC products. This advantage provides industry leading digital signal processing performance for applications where thermal management sets the limit for power consumption, or where the higher costs and lower reliability of fans cannot be tolerated. Applications include automotive, consumer and professional audio, multi-axis motor control, and energy… Show More..

Comparable Parts | Click to see all in Parametric Search

Product Lifecycle

☑ Pre-Release

This product is new and engineering validation may still be underway. Quantities may be limited and design specifications may change while we ready the product for release to production.

Evaluation Kits (2)

EMULATOR-ADSP | Low Cost ICE-1000 and High Performance ICE-B-based JTAG Emulators

See All Evaluation Kits

Documentation

7 See All | 1 Data Sheets | 3 Application Notes | 2 Processor Manuals | 1 Integrated Circuit Anomalies

ADSP-SC57x/ADSP-2157x: SHARC+ Dual Core DSP with ARM Cortex-A5 Preliminary Data Sheet (Rev. PrC) PDF 3.03 M

EE-387: Interfacing DDR3/DDR2/LPDDR Memory to ADSP-SC5xx/ADSP-215xx Processors PDF 2.07 M

EE-387: Associated Zip File ZIP

EE-253: Power Bypass Decoupling of SHARC® Processors (Rev. 1) PDF 354 kB

EE-261: Understanding Jitter Requirements of PLL-Based Processors (Rev. 1)	PDF 90 kB
ADSP-SC57x/ADSP-2157x SHARC+ Processor Hardware Reference (Rev. 0.1)	PDF 13.02 M
SHARC+ Core Programming Reference	PDF 6.32 M
ADSP-SC570/SC571/SC572/SC573/ADSP-21571/21573 Silicon Anomaly List for Revision(s) 0.0 (Rev. A)	PDF 183.97 K

Software & Systems Requirements

Middleware

Micriμm μC/FS

The Micriμm μC/FS™ File System for CrossCore® Embedded Studio is a compact, reliable, high-performance file system which is the result of collaboration between Analog Devices and Micriμm.

Lightweight TCP/IP (lwIP) Stack

The Lightweight TCP/IP (lwIP) Stack for CrossCore Embedded Studio is and implementation of this widely accepted TCP/IP stack for embedded platforms supporting most of the networking protocols in the TCP/IP suite.

Micrium μC/USB Device

μC/USB Device™ Stack for CrossCore® Embedded Studio

Micriμm μC/OS-III

The Micriμm μC/OS-III® Real-Time Kernel for CrossCore Embedded Studio (CCES) provides a user-friendly programming environment for μC/OS-III applications running on Blackfin and SHARC processors.

Micriμm μC/OS-II

The Micriμm μC/OS-II® Real-Time Kernel for CrossCore Embedded Studio (CCES) provides a user-friendly programming environment for μC/OS-III applications running on Blackfin and SHARC processors.

See All 6 Middleware

Software Development Tools

CrossCore Embedded Studio

CrossCore® Embedded Studio is a world-class integrated development environment (IDE) for the Analog Devices Blackfin®, SHARC® and ARM™ processor families.

Tools & Simulations

IBIS Models

ADSP-SC572/ADSP-SC573/ADSP-21573 IBIS

Model CSPBGA Package IBS

2.47 M

Reference Materials

1 See All 1 Press Release

Press Release

New Analog Devices SHARC® Processor Platform Delivers Superior Sound...

Design Resources

ADI has always placed the highest emphasis on delivering products that meet the maximum levels of quality and reliability. We achieve this by incorporating quality and reliability checks in every scope of product and process design, and in the manufacturing process as well. "Zero defects" for shipped products is always our goal.

ADSP-SC573 Material Declaration

PCN-PDN Information

Quality And Reliability

Symbols and Footprints

Discussions

ADSP-SC573 Discussions

IIR Accelerator Cycle Calculation for ADSP-SC573
4 week(s) ago in SC5xx/ADSP

ADSP-SC573 Power on self test
12 week(s) ago in SC5xx/ADSP

Porting ADSP-21469 VDK application to ADSP-SC573 µC/OS
20 week(s) ago in ins

All ADSP-SC573 Discussions

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Sample & Buy

Model	Package	Pins	Temp Range	Packing Qty	Price (100-499)	Price (1000+)	RoHS	Order from Analog Devices
ADSP-SC573-BCZENG Request PCN/PDN Notification Pre-Release	CHIP SCALE BGA	400	-40 to 70C	Tray, 0	-	-	Y Info	Contact ADI

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Price Table Help

Evaluation Boards

Pricing displayed is based on 1-piece.

Model	Description	RoHS	
ADZS-ICE-1000 Production	Low Cost USB-based JTAG Emulator		Yes
ADZS-ICE-2000 Production	High Performance USB-based JTAG Emulator		Yes
ADZS-SC573-EZLITE Production	EZ-BRD with ICE-1000 and 2x 180 Day CCES License		Yes

Back | Add to cart | Select a country | Check Inventory

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15,000
Problem Solvers

4,700+
Patents Worldwide

125,000
Customers

50+
Years

Ahead of What's Possible

ADI enables our customers to interpret the world around us by intelligently bridging the physical and digital with unmatched technologies that sense, measure and connect. We collaborate with our customers to accelerate the pace of innovation and create breakthrough solutions that are ahead of what's possible.

See the Innovations

Analog Devices. Dedicated to solving the toughest engineering challenges.

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