
About Arm Flexible Access

Arm Flexible Access provides up-front, low-cost access to a wide range of Arm IP, support, tools, and training. Innovate new designs with a huge range of Arm CPUs, GPUs, interconnect, security blocks, and more. Experiment and design with the entire portfolio—license fees are due at the point of manufacture, and calculated only on the IP included in the final SoC design.

For more information, contact your Arm account manager today or visit <https://arm.com/products/flexible-access>

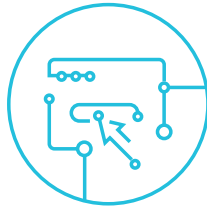
If you are an early stage startup, you could benefit from the Arm Flexible Access for Startups program, giving free access to the Entry Tier. For more information visit <https://www.arm.com/products/flexible-access/startup>.

How does Arm Flexible Access work?



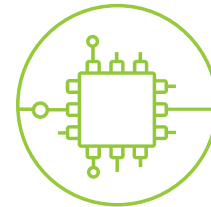
Access

- Widest range of Arm IP, tools and services
- Annual access fee covers design rights
- Any or all of the IP package is downloadable at any time



Design

- Freedom to start, change or stop projects as needed
- Model your workload across included IP for best-fit design
- World-wide access to Arm training and support



Manufacture

- Licensing payment only for IP used at tape out, not before
- Transparent and simple business terms














How much does Arm Flexible Access cost?

	Entry	Standard
Access fee	\$75k per annum \$0 for startups*	\$200k per annum
License fees (due on project manufacture)	Calculated per project based on IP used	
Royalties	Calculated per project and paid per unit shipped	

*Startups with <\$5M funding, <1M annual revenue, privately held

What is included in Arm Flexible Access?

	Entry	Standard
Access to entire mainstream product package, including CPUs, GPUs, Corstone foundation IP, system IP, security IP and safety packages	Y	
Technical support from Arm expert engineers	Y	
Onboarding session with an Arm support engineer	Y	
Evaluation, exploration, and full design rights	Y	
Number of tape-outs per year	1	Unlimited
Number of online training seats for introductory training on a selection of mainstream IP products	5	25
Arm Development Studio seats (Arm DS Gold)	1	3
Arm configuration tool seats - Socrates	1	1
Arm fixed configuration system models seats (fast and cycle-accurate)	1	2
Arm Service Tokens (can be used for training, design reviews, and onsite support)	Purchased separately	15 Service Tokens (equivalent to \$30k in value) for quick and flexible access to help, when you need it. Can be used for 3 days of onsite training or put toward a design review from Arm's expert engineering team.*

Product	Description	Safety Packages Available 	Learn more about this product
Cortex Processors			
Cortex-A53 Processor 	Low-power processor with 32-bit and 64-bit capabilities, applicable in a range of devices requiring high performance in power-constrained environments. <i>Reference design & supporting system IP available in Corstone-700. Subsystem requires minor modifications to integrate this processor.</i>		https://www.arm.com/products/silicon-ip-cpu/cortex-a/cortex-a53
Cortex-A35 Processor 	Ultra-high efficiency smart device processor, the smallest and most power-efficient 32-bit and 64-bit Arm application processor. <i>Reference design & supporting system IP available in Corstone-700. Subsystem requires minor modifications to integrate this processor.</i>		https://www.arm.com/products/silicon-ip-cpu/cortex-a/cortex-a35
Cortex-A34 Processor 	Low-power 64-bit only processor with ultra-high efficiency. <i>Reference design & supporting system IP available in Corstone-700. Subsystem requires minor modifications to integrate this processor.</i>		https://www.arm.com/products/silicon-ip-cpu/cortex-a/cortex-a34
Cortex-A32 Processor 	Low-power 32-bit only processor with ultra-high efficiency. <i>Reference design & supporting system IP available in Corstone-700.</i>		https://www.arm.com/products/silicon-ip-cpu/cortex-a/cortex-a32
Cortex-A7 Processor	Power-efficient processor, designed for a wide range of devices with differing requirements demanding balance between power and performance.		https://www.arm.com/products/silicon-ip-cpu/cortex-a/cortex-a7
Cortex-A5 Multi-Processor	Smallest Cortex-A processor designed for applications that require virtual memory management for high-level operating systems within a low-power, low-area profile.		https://www.arm.com/products/silicon-ip-cpu/cortex-a/cortex-a5
Cortex-A5 Uni-Processor			https://www.arm.com/products/silicon-ip-cpu/cortex-a/cortex-a5
Cortex-R52 Processor 	Designed for advanced silicon processes requiring high-performance and cost-effective processing. Delivers real-time performance for functional safety.		https://www.arm.com/products/silicon-ip-cpu/cortex-r/cortex-r52
Cortex-R8 Processor	Designed for products with high performance requirements where timing deadlines must always be met.		https://www.arm.com/products/silicon-ip-cpu/cortex-r/cortex-r8
Cortex-R5 Processor 	Offers high-performance computing solutions for embedded systems that require reliability, high availability, fault tolerance, and real-time responses.		https://www.arm.com/products/silicon-ip-cpu/cortex-r/cortex-r5
Cortex-M33 Processor 	Optimized for cost and power-sensitive microcontroller and mixed-signal applications. Designed for applications requiring efficient security or digital signal control. New Arm Custom Instructions allow optimization for specific workloads. <i>Reference design & supporting system IP available in Corstone-201.</i>		https://www.arm.com/products/silicon-ip-cpu/cortex-m/cortex-m33
Cortex-M23 Processor 	Smallest and lowest-power microcontroller with Arm TrustZone security, ideal for applications requiring software isolation and security. <i>Reference design & supporting system IP available in Corstone-102.</i>		https://www.arm.com/products/silicon-ip-cpu/cortex-m/cortex-m23
Cortex-M7 Processor 	The highest performance CPU in the energy-efficient Cortex-M processor family and includes digital signal processing (DSP) instructions.		https://www.arm.com/products/silicon-ip-cpu/cortex-m/cortex-m7
Cortex-M4 Processor 	Designed to address applications requiring digital signal processing, with a blend of efficient, easy-to-use control and signal processing capabilities. <i>Supporting system IP available in Corstone-101.</i>		https://www.arm.com/products/silicon-ip-cpu/cortex-m/cortex-m4
Cortex-M3 Processor 	Designed for cost-sensitive and power-constrained solutions in a broad range of devices. Balanced between area, performance, and power. <i>Reference design & supporting system IP available in Corstone-101.</i>		https://www.arm.com/products/silicon-ip-cpu/cortex-m/cortex-m3
Cortex-M0+ Processor 	The smallest footprint and lowest power requirements of all Cortex-M processors, suitable for a wide variety of applications, including sensors and wearables. <i>Reference design & supporting system IP available in Corstone-101.</i>		https://www.arm.com/products/silicon-ip-cpu/cortex-m/cortex-m0-plus
Cortex-M0 Processor	Small footprint and high efficiency, ideal for simple, cost-sensitive devices. <i>Reference design & supporting system IP available in Corstone-101.</i>		https://www.arm.com/products/silicon-ip-cpu/cortex-m/cortex-m0

Corstone IP

Cortex processor reference design and supporting system IP. Simplifies silicon design and reduces time to market.

Corstone-700 IP	Corstone-700 is a reference design that integrates Cortex-A and Cortex-M processors. It is built for high performance IoT endpoints, gateways, and embedded applications. It includes a verified subsystem based on Cortex-A32 with support for up to two Cortex-M system expansion, advanced power management, authenticated debug, a Cortex-M0+ based Secure Enclave for hardware root of trust, a dedicated firewall IP for enhanced security. All required system IP are included, enabling rendering and further modifications of the design. Cryptographic accelerator is not included.	https://www.arm.com/products/iot/soc/corstone-700
Corstone-201 IP	Reference design and system IP for building a secure system on chip with the Cortex-M33 processor. The Corstone-201 contains various system IP components and a reference design subsystem integrating the processor, memory, debug, security and power control. It is designed for the mainstream market targeting performance balanced with power efficiency.	https://www.arm.com/products/iot/soc/corstone-201
Corstone-102 IP	The Arm Corstone-102 provides a flexible reference design and system IP for small, low cost and energy efficient SoC development. Based on the Arm Cortex-M23 processor, the Corstone-102 is targeted at the constrained market segment for secure IoT applications.	https://www.arm.com/products/iot/soc/corstone-102
Corstone-101 IP	The Arm Corstone-101 contains a reference design based on the Cortex-M3, as well as various other system IP components. It provides all of the fundamental system elements to design a SoC around Arm Cortex-M0/Cortex-M0+/Cortex-M3/Cortex-M4 processors.	https://www.arm.com/products/iot/soc/corstone-101

Mali Multimedia Processing

Mali-G52 Graphics Processor	Designed to bring premium visual experiences to mainstream markets with heightened machine learning capabilities.	https://www.arm.com/products/silicon-ip-multimedia/gpu/mali-g52
Mali-G31 Graphics Processor	The first ultra-efficient GPU based on the Bifrost architecture targeting smaller applications such as IoT.	https://www.arm.com/products/silicon-ip-multimedia/gpu/mali-g31
Mali-C32 Image Signal Processor	High precision and high dynamic range image signal processor. Optimized for area. Ideal for low-power, cost-sensitive embedded vision devices.	https://www.arm.com/products/silicon-ip-multimedia/image-signal-processor/mali-c32
Mali-C52 Image Signal Processor	State-of-the-art image signal processing with class-leading high dynamic range image quality in real-time. Can be optimized for performance or area.	https://www.arm.com/products/silicon-ip-multimedia/image-signal-processor/mali-c52
Mali Arm Frame Buffer Compression (AFBC)	Ready to be integrated with non-Arm multimedia IP blocks to bring the advantages of Arm Frame Buffer Compression (AFBC) across the SoC. AFBC minimizes multimedia system bandwidth requirements, significantly reducing SoC power consumption.	https://www.arm.com/why-arm/technologies/graphics-technologies/arm-frame-buffer-compression

Security IP

CryptoCell-312 Security IP	High-efficiency, low-footprint platform security and cryptographic services targeting multiple threats across various IoT domains.	https://www.arm.com/products/silicon-ip-security/crypto-cell-300
CryptoCell-712 Security IP	An outstanding level of security to target a broad set of threats, while addressing requirements for increased system complexity, high performance, low power consumption.	https://www.arm.com/products/silicon-ip-security/crypto-cell-700
True Random Number Generator	A mandatory component in any system that generates cryptographic assets.	https://www.arm.com/products/silicon-ip-security/random-number-generator

CoreLink Interconnect

CoreLink CCI-550 Cache Coherent Interconnect	Full coherency with up to six clusters including big.LITTLE and coherent accelerators. High performance and power efficiency with integrated snoop filter.	https://www.arm.com/products/silicon-ip-system/corelink-interconnect/cci-550
CoreLink CCI-500 Cache Coherent Interconnect	Full coherency with up to four clusters including big.LITTLE and coherent accelerators. High performance and power efficiency with integrated snoop filter.	https://www.arm.com/products/silicon-ip-system/corelink-interconnect/cci-500
CoreLink CCI-400 Cache Coherent Interconnect with CPE-425	Provides full cache coherency between two clusters of multi-core CPUs. Enables big.LITTLE processing and I/O coherency for devices.	https://www.arm.com/products/silicon-ip-system/corelink-interconnect/cci-400
CoreLink NIC-450 Network Interconnect	Highly configurable topology with network-on-chip properties for building high-performance, optimized, AMBA-compliant SoC connectivity, including QoS and Thin links.	https://www.arm.com/products/silicon-ip-system/corelink-interconnect/nic
CoreLink NIC-400 Network Interconnect	Highly configurable topology with network-on-chip properties for building high-performance, optimized, AMBA-compliant SoC connectivity.	https://www.arm.com/products/silicon-ip-system/corelink-interconnect/nic
CoreLink ADB-400 AMBA Domain Bridge	An asynchronous bridge between two components or systems that can be in a different power, clock, or voltage domains.	https://developer.arm.com/ip-products/system-ip/corelink-interconnect/corelink-network-interconnect-family
CoreLink PCK-600 Power Control Kit	Power Control Kit with a suite of system IP to ease system power and clock management infrastructure integration.	https://www.arm.com/products/silicon-ip-system/system-controllers/pck-600
CoreLink XHB-400 AXI4-AHB Bridge	Converts AXI4 protocol to AHB-Lite protocol via an AXI4 slave interface and an AHB-Lite master interface.	https://developer.arm.com/ip-products/system-ip/corelink-interconnect/corelink-network-interconnect-family
CoreLink XHB-500	XHB-500 provides an AMBA AXI5 to AHB5 bridge and an AHB5 to AXI5 bridge.	https://developer.arm.com/docs/101375/latest/introduction/about-the-xhb-500-bridges

CoreLink System Controllers

CoreLink AHB Cache	AHB Cache can be implemented as a processor cache (data or generic), or a system cache. It can be used for both code and data. The cache provides AHB5 data interfaces and an APB configuration interface, both with TrustZone for Armv8-M support.	https://developer.arm.com/ip-products/system-ip/system-controllers/cache-controllers
CoreLink DMA-330 AXI DMA Controller	A high-performance DMA controller that can boost the performance and reduce the power consumption in AXI-based systems.	https://www.arm.com/products/silicon-ip-system/embedded-system-design/dma-330
CoreLink DMA-230 AHB Micro DMA Controller	Low gate count (3-10k gates) micro-DMA engine targeting AHB-based Cortex-M systems.	https://www.arm.com/products/silicon-ip-system/embedded-system-design/dma-230
CoreLink GIC-500 Generic Interrupt Controller	Detects, manages, virtualizes, and distributes interrupts for Armv8.0-A processors. Configurable up to 128 single-threaded cores and 960 shared interrupts.	https://www.arm.com/products/silicon-ip-system/system-controllers/gic
CoreLink GIC-400 Generic Interrupt Controller	Detects, manages, and virtualizes interrupts for Armv7 processors. Configurable up to 8 cores and 480 shared interrupts.	https://www.arm.com/products/silicon-ip-system/system-controllers/gic
PL192 Vectored Interrupt Controller	An advanced vectored interrupt controller supporting up to 32 vectored interrupts with programmable priority level and masking.	https://developer.arm.com/ip-products/system-ip/system-controllers/peripheral-controllers
CoreLink TZC-400 TrustZone Address Space Controller	Performs security checks on transactions to memory or peripherals, configurable up to 8 regions.	https://www.arm.com/products/silicon-ip-security/address-space-controllers
CoreLink L2C-310 AXI Level 2 Cache Controller	High-performance, AXI level 2 cache controller designed and optimized to address Arm AXI processors, normally used with Cortex-A5.	https://www.arm.com/products/silicon-ip-system/embedded-system-design/l2c-310

CoreLink MMU-500 System Memory Management Unit	System memory management unit that includes caching and memory virtualization. Enforces memory protection and access control, and is designed for use in a virtualized system where multiple guest operating systems are managed by a hypervisor. Supports Armv8-A and Armv7-A.	https://www.arm.com/products/silicon-ip-system/system-controllers/mmu
BP140 AXI Internal Memory Interface	AXI to on-chip SRAM interface.	https://developer.arm.com/docs/dto0009/a
BP141 TrustZone AXI Memory Interface	AXI to on-chip SRAM interface with support for Arm TrustZone protection for secure memory regions.	https://developer.arm.com/products/system-ip/system-controllers/other-system-controllers

Peripheral Controllers

PL011 UART Universal Asynchronous Receiver/Transmitter	Peripheral controllers for UART, SPI and real-time clock.	https://developer.arm.com/ip-products/system-ip/system-controllers
PL022 SPI Synchronous Serial Port		https://developer.arm.com/ip-products/system-ip/system-controllers
PL031 RTC Real Time Clock		https://developer.arm.com/ip-products/system-ip/system-controllers

CoreSight Debug & Trace

CoreSight SoC-600 Debug and Trace	For high-bandwidth debug and trace solutions. Includes remote and local debug access, trace routing and termination, cross-triggering and time stamping.	https://www.arm.com/products/silicon-ip-system/coresight-debug-trace/soc-600
CoreSight SoC-600M Debug and Trace	Debug and trace components for multi-core Cortex-M based SoCs. Includes remote and local debug access, trace routing and termination, cross-triggering and time stamping.	https://www.arm.com/products/silicon-ip-system/coresight-debug-trace/soc-600M
CoreSight SoC-400 Debug and Trace	Configurable components, including debug access trace generation manipulation and output, cross triggering, and time stamping.	https://www.arm.com/products/silicon-ip-system/coresight-debug-trace/soc-400
CoreSight SDC-600 Secure Debug Channel	Addresses device security needs by allowing silicon and tool vendors to enforce protection and police debug access, and by working closely with cryptographic elements and debug certificate authentication.	https://www.arm.com/products/silicon-ip-system/coresight-debug-trace/sdc-600
CoreSight ELA-600 Emb Logic Analyzer	Embedded Logic Analyzer with highest data tracing efficiency and capacity. Improves system efficiency with run-time signal monitoring and control.	https://www.arm.com/products/silicon-ip-system/coresight-debug-trace/coresight-ela-600
CoreSight ELA-500 Emb Logic Analyzer	Embedded Logic Analyzer providing an effective way to observe low-level signals in an SoC, offering a way to zoom into the root cause of data corruption.	https://www.arm.com/products/silicon-ip-system/coresight-debug-trace/coresight-ela-500
CoreSight STM-500 System Trace Macrocell	Trace source for real-time software instrumentation with no impact on system behavior or performance. Extends the low-cost, real-time visibility of software and hardware execution to all software developers. Supports 64-bit memory interfaces.	https://www.arm.com/products/silicon-ip-system/coresight-debug-trace/coresight-stm-500
CoreSight System Trace Macrocell	System Trace Macrocell supporting 32-bit memory interfaces.	https://developer.arm.com/ip-products/system-ip/coresight-debug-and-trace/coresight-components/system-trace-macrocell
CoreSight Trace Memory Controller	A configurable trace component to terminate trace buses into buffers, FIFOs, or alternatively, to route trace data over AXI to memory or off-chip to interface controllers.	https://www.arm.com/products/silicon-ip-system/coresight-debug-trace/coresight-tmc


Artisan Physical IP

Artisan PIK for Cortex-M33 TSMC 22ULL	Processor Implementation Kit (PIK) for Cortex-M33 based on Artisan 22ULL Physical IP.	https://www.arm.com/products/silicon-ip-physical
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Artisan Memory Compilers TSMC 22ULL	Physical IP solution for TSMC 22ULL, including memory compilers, logic libraries, GPIOs and documentation.	https://www.arm.com/products/silicon-ip-physical
Artisan SC7MC Logic Libraries TSMC 22ULL		
Artisan SC6MC Logic Libraries TSMC 22ULL		
Artisan GPIO TSMC 22ULL		
Artisan Documentation TSMC 22ULL		

Additional logic IP, standard cell, embedded memory compilers, interface IP and POP IP across many foundry nodes are also available without a license fee via DesignStart (designstart.arm.com).

Virtual System Models

Arm Flexible Access Model Package 	<p>To realize and maximize the benefits of developing a custom SoC, selecting the optimum IP and IP configuration is essential. The Arm Flexible Access Model Package gives SoC architects the data that needed to decide what Arm IP and IP configuration to choose.</p> <p>Arm Flexible Access Models are virtual representations of Arm IP-based systems. Each system has two representations, one based on Arm Cycle Models and the other based on Arm Fast Models. The Fast Models system enables developers to quickly develop and debug software. The Cycle Models system enables accurate IP selection decisions.</p>	https://www.arm.com/products/development-tools/simulation/fix-virtual-platforms
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Safety Packages

Cortex-A53 Safety Package	<p>Safety Packages provide information used by chip developers when creating SoCs for functional safety applications and for easing the process of obtaining safety certification. They contain documentation specific for an individual processor.</p> <p>Cortex-R52, Cortex-M4, Cortex-M3, and Cortex-M0+ Safety Packages also provide access to their respective Software Test Library (STLs) to enable integration of the library.</p>	https://www.arm.com/why-arm/technologies/safety
Cortex-R52 Safety Package		
Cortex-R5 Safety Package		
Cortex-M33 Safety Package		
Cortex-M23 Safety Package		
Cortex-M7 Safety Package		
Cortex-M4 Safety Package		
Cortex-M3 Safety Package		
Cortex-M0+ Safety Package		

Training

Arm On-Demand Online Training	<p>Arm On-Demand training provides access to a wealth of training content, speeding up silicon development and providing the knowledge you need, when and where you need it. Topics including Arm CPU Architectures, AMBA bus protocols and Arm tools and models are delivered via over 500 bite sized videos and accompanying knowledge checks. Access is available via a web browser on PC, Tablet or Mobile with transcripts available in Korean, Simplified and Traditional Chinese and Japanese. Contact account manager for access.</p>	www.arm.com/support/training
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