Cyclone FX

Overview

Cyclone flash programmers are powerful tools for in-circuit programming, debugging, and testing of MCU devices. They can function in stand-alone mode or be controlled from a PC. Programming may be launched by a single button press without a PC, or automatically from a PC via the automated control SDK.

Cyclone users choose to create either stand-alone programming Images or cloud-connected Jobs. Both are self-contained programming objects that can be delivered locally directly to the Cyclone, but a cloud-connected Job adds the option of delivering the Job securely and remotely via the PEcloud platform. Cloud-connected Jobs can also be stopped and started remotely and their results logged.

Cyclone programmers support thousands of devices and offer security and encryption features to help users protect valuable IP. They are versatile tools that offer on-board storage of programming Images/Jobs, provide power to the target, support manual or automated programming, and have an easy-to-use touchscreen interface. Cyclone programmers can additionally be used as debug probes during development and are supported by many IDEs.

Extended Security Features	Anti-tamper Technology Internal memory protection & encryption ProCryption Security includes: o RSA/AES image encryption o Limit date range of image programming o Limit # of programming operations
On-Board Storage	1GB, 200+ programming images
High-Speed Target Communications	Extremely fast: Up to 75Mb/s
Expandable Storage - SDHC Memory Card Support	Includes SDHC card support for storing programming images and data on external SDHC cards
Advanced Hardware Features	Select and Launch programming via a barcode scanner
Multiple SAP Images	No practical limit to number of images stored in 1GB of onboard Cyclone memory
Cyclone Control & Automation	Includes Powerful Standard Automation Features Can use Cloud-connected Jobs via the PEcloud platform
Advanced Testing Features	Run Tests Before Final Programming

Device Support

ARM Cortex devices

Analog Devices	Wireless
AutoChips	MCU
CVA Chip	M01
Cypress	CCG2, CCG3PA, EZ-BLE-PSoC-PRoC, FM3, PSoC5
Flagchip as Flagship	FC4150F, FC7240, FC7300
Geehy	APM32
GigaDevice	GD32
indie Semi	ADAS/Autonomous, ASIC, UserExperience
Infineon	MOTIX™, PRoC-BLE, PSoC4, PSoC6, Traveo-II, XMC, XMC7000
Maxim Integrated	DARWIN
Microchip (Atmel)	PIC32, SAMxxx
MindMotion	MM32F, MM32SPIN
NordicSemi	nRF51, nRF52, nRF53, nRF91
Nuvoton	Nano, NuMicro
NXP	Automotive, iMX RT, Kinetis, LPC, MCX, Sensors,Trimension, Vybrid, Wireless
OMNIVISION	OMX14X
OnBright	OB90Rxx
onsemi	RSL10, Wireless-RF-Transceivers
Qorvo	Intelligent Motor Controllers
Raspberry Pi	RP2xxx
Redpine Signals	WiSeMCU
Renesas	RA, SmartBond, Synergy
Silergy (Maxim)	AM0x, AM1x, MAX716xx, SY7x2xx
Silicon Labs	EFM32, EFR32, SiM3, WiFi
STMicroelectronics	Bluetooth, STM32
Texas Instruments	LM3S, LM4, MSP, SimpleLink, TM4C12x
Toshiba	TX00, TX03, TX04
WIZnet	W7500x
Yuntu	YTM32B1LD0, YTM32B1LE0, YTM32B1MD1
ZHIXIN	MCU

8/16/32 bit devices

NXP	S32, ColdFire® V1, ColdFire® V2/V3/V4, Qorivva® (MPC5xxx), DSC, MPC5xx/8xx, ARM Nexus (MAC7xxx), S12Z, HC(S)12(X), HC08, HCS08, RS08
Infineon	TriCore (DAP only - AUDO TC1xx & AURIX TC2xx/ TC3xx)
STMicro	SPC5, STM8
Renesas	H8 and H8S/Tiny, MC16C and M16C80, M32C, R8C, RH850, RL78, RX600