

Data: 11/05/2016
Author: Pietro Poletto
Revision: 1.0

Algocraft increases the performance of the programming algorithm for Infineon 32-bit Tricore Aurix™ family

Algocraft updates the programming algorithm for Infineon 32-bit Tricore. With this new version we reached excellent performances in terms of programming times of FLASH memory and EEPROM, never seen up to now in an in-circuit multi-site system.

The WriteNow! technology allows the programming of up to 8 devices at once, drastically reducing programming times, costs, and system complexity. In addition, the WriteNow! technology performances allow to reach the theoretical programming speed for any given device, thus shortening as much as possible the programming phase of the production process.

Thanks to this optimized WriteNow! architecture, it is now possible to program AURIX Infineon family (device code TC2XX) reducing up to three times the programming speed compared to our competitors.

WriteNow! uses the standard JTAG protocol as programming interface.

Algocraft provides support of Infineon Tricore Aurix™ family to the whole WriteNow! Series, single and parallel in-system programmers. Four models are available: WN-PRG01A (programs 1 device at a time), WN-PRG02A (programs 2 devices in parallel), WN-PRG04A (programs 4 devices in parallel), and WN-PRG08A (programs 8 devices in parallel).

In addition, external demultiplexer modules are available as accessories for multiple-site WriteNow! models, giving the flexibility to program up to 32 devices in easy way.

The complete programming time for TC237LP-32F200S device (2MB embedded Flash w/ ECC protection) included the program and verify of the whole memory size is about 8 seconds. The chip erase time is about 5s.

AURIX™ is an Infineon's brand new family of microcontrollers serving exactly the needs of the automotive industry in terms of performance and safety. Its innovative multicore architecture, based on up to three independent 32-bit TriCore™ CPUs, has been designed to meet the highest safety standards while increasing the performance at the same time.

The following picture shows the Infineon AURIX Family:

	TQFP-80	TQFP-100	LQFP-144 TQFP-144	LQFP-176	LFBGA-292	BGA-416	LFBGA-516
9x Series up to 8MB					TC297 300MHz	TC298 300MHz	TC299 300MHz
7x Series up to 4MB				TC275 200MHz	TC277 200MHz		
6x Series up to 2.5MB			TC264 200MHz	TC265 200MHz	TC267 200MHz		
3x Series up to 2MB		TC233 200MHz	TC234 200MHz		TC237 200MHz		
2x Series up to 1MB	TC222 133 MHz	TC223 133MHz	TC224 133MHz				
1x Series up to 512KB	TC212 133 MHz	TC213 133MHz	TC214 133MHz				