Microprocessor MCp042R100102 is designed on the basis of multicellular architecture and includes multicellular processor core.

Microprocessor MCp042R100102 is applicable for general industrial purposes and as an auxiliary in SiP chip assemblies for space on-board equipment requiring advanced peripheries.

Available in LQFP-256 plastic package:

MCp042R100102-LQ 256 I, temperature range -40°C... + 125°C
MCp042R100102-LQ 256 M, temperature range -60°C... + 125°C

General advantages:

- Dynamic Reconfiguration (R series – Reconfiguration);
- High Performance and simultaneous reduction of power consumption;
- DTC - the modifed unit for operation with memory;
- Developed system of interruption;
- Extended features of debugging on JTAG.

Basic technical characteristics:

Parameters	MCp042R100102 LQ256
Core	MCp042R1
Amount of cells	4
Architecture	multicellular
Package type	LQFP-256 28x28 mm
Technical process	0,18 µm
Word length	32/64 bit
Clock frequency	100 MHz
PLL (input frequency 8-16 MHz)	+
Performance	2,4 GFLOPS
Data memory	256 Kb
Program memory	256 Kb
Voltage	core - 1,8 V

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	periphery - 3,3 V
Maximum power consumption (at FFT)	1.05 W
The energy consumption on a mixture at 75%DMAC+25%ADD (Typical Sine Wave Data Switching)	0.63 W
Floating point (double precision IEEE – 754 FPU)	+
DAC	100msps 12 bits
ADC	2x4 channels: 48ksps 16 bits

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