

№	Parameter/Processor	MultiClet P1	MultiClet R1-1	MultiClet R1	Analog					
		MultiClet MCp0411100101	MultiClet MCp042R100102-1	MultiClet MCp042R100102	Texas Instruments OMAP L-138	Analog Devices ADSP-21469	Texas Instruments TMS320C6701	Analog Devices ADSP - TS201S	Intel Pentium 4	
Technological characteristics										
1	Core	MultiClet	MultiClet	MultiClet	C674+ARM9	SHARC	TMS320C6000	TigerSHARC	Willamette	
2	Cells number / core number / number of executive units	4/-/-	4/-/-	4/-/-	-/1/8	-/-/6	-/-/8	-/-/6	-/1/-	
3	Architecture	Multicellular	Multicellular	Multicellular	Harvard RISC	Harvard	Harvard	Harvard	Harvard IA-32	
4	Package type	QFP-208	LQFP-256	LQFP-256	PBGA-361	PBGA-324	BGA-352	Ball BGA-576	FC-PGA2-423	
5	Technological process (µm)	0,18	0,18	0,18	0,065	0,065	0,18	0,13	0.18	
6	Temperature range	-60 to +125° C ²	-60 to +125° C ²	-60 to +125° C ²	-40 to 90° C	от -40 до +85° C	-40 to 105° C	-40 to +85° C	-40 to +85° C	
7	Chip area (sq.mm)	100	144	144	NA ¹	NA ¹	NA ¹	NA ¹	217	
8	Capacity (bit)	32/64	32/64	32/64	32	32	32	32/64	32	
9	Frequency (MHz)	100	80	150	456	400	167	600	2000	
10	Performance (GFlops)	2,4	1,9	3,6	2,7	2,4	1	3,6	2	
11	Memory (Kb)	ROM ⁴	-	-	-	64	500	64	NA ¹	NA ¹
		RAM	DM -128 (4*4K*64) PM -128 (4*4K*64)	DM -256 PM -256	DM -256 PM -256	8	625	64	3000	NA ¹
12	Voltage (V)	Core	1,8	1,8	1,8	1,8	1,8	1,8	1,2	1,8
13		Peripherals	3,3	3,3	3,3	3,3	3,3	3,3	3,3	NA ¹
14	Maximum power consumption (Wt)	1,08	0,6	0,6	1	1	1,8	3,4	100	

15	Floating point unit	+	+	+	+	+	+	+	+
Peripheral interfaces									
16	SPI	3	3	3	2	2	McBSPs ³	-	-
17	I2S	1	1	1	1	1	-	-	-
18	I2C	2	2	2	2	1	-	-	-
19	USART	-	-	-	-	-	-	-	-
20	UART	4	4	4	3	1	-	-	-
21	USB	1.1 FS (device)	2,0 HS (device)	2,0 HS (device)	2	1.1 FS (host) + 2.0	-	-	-
22	ADC	-	-	16 bit, 48 ksps, 8 channels	-	-	-	-	-
23	DAC	-	-	12 bit, 125 ksps, 2 channels	-	-	-	-	-
24	External memory interface	-	data bus 32 bit SRAM, SDRAM, PROM, IO	data bus 32 bit SRAM, SDRAM, PROM, IO	NOR, NAND, SDRAM, DDR2	DDR2	data bus 32 bit SRAM, SDRAM, SBSRAM, EEPROM	data bus 64 bit SDRAM	
25	PLL	-	+	+	+	+	+	+	
26	Ethernet	Ethernet 10/100Mbit/s	Ethernet 10/100Mbit/s	Ethernet 10/100Mbit/s	Ethernet 10/100Mbit/s	-	-	-	-
27	PWM	1	1	1	2	4	-	-	-
28	GPIO	104	166	166	NA ¹	NA ¹	NA ¹	NA ¹	NA ¹
29	System timer, capacity	1/32	4/32	4/32	-	1/32	-	-	NA ¹
30	General purpose, capacity	7/32	2/32 2ch 4ch	2/32 2ch 4ch	3/64	2/32	2/32	2/64	NA ¹
31	Watchdog timer	1	1	1	1	1	1	1	1
Software									
32	Assembler	+	+	+	+	+	+	+	+

33	C compiler	+	+	+	+	+	+	+	+
34	Debugger, JTAG	+	+	+	+	+	+	+	+
35	Operation system	FreeRTOS	FreeRTOS	FreeRTOS	Linux, BIOS, Win CE	NA ¹	NA ¹	NA ¹	Windows, Linux
36	Program environment	+	+	+	+	+	+	+	+
Other parameters									
37	Sphere of application	general industry	general industry	general industry	general industry	audio processing	general industry	general industry	general industry
38	Price (USD)	> 18	> 18	> 18	19	38	NA ¹	287	NA ¹

Data in the table was found in open sources of Internet. "MULTICLET" is not responsible for data correctness.

¹ NA - data not available

² In plastic package

³ McBSPs - multichannel serial port

⁴ Recommended list of flash ROM for using with processor MCp0411100101

№	Flash name	Company	Company	Company	Package	Power, B	Temper. range
1	XCF04S	Xilinx	Xilinx	Xilinx	VO20/VOG20	1.8 – 3.3	–40°C +85°C
2	XCF08P	Xilinx	Xilinx	Xilinx	VO48/VOG48 FS48/FSG48	1.8 – 3.3	–40°C +85°C
3	XCF16P	Xilinx	Xilinx	Xilinx	VO48/VOG48 FS48/FSG48	1.8 – 3.3	–40°C +85°C
4	XCF32P	Xilinx	Xilinx	Xilinx	VO48/VOG48 FS48/FSG48	1.8 – 3.3	–40°C +85°C