

### MULTICLET P1

Processor core MULTICLET P1 is oriented at maximum **Performance** and simultaneous reduction of power consumption on the basis of multicellular architecture, which gives the core properties of natural implementation of parallelism in the processing process. MULTICLET P1 is fully synthesizable.

Nomenclature	Implementation	Description
<b>MCc040P1</b>	FPGA	4-cells, 16/32bit, fixed point processor core contains ALU in each cell. Calculated value of power consumption on 180nm is 213 $\mu$ W/MHz.
<b>MCc041P1</b>	SoC	4-cells, 32/64bit FPU processor core contains ALU in each cell. Performance is 3.2 MIPS/MHz. Power consumption on 180nm is 9 mW/MHz.
<b>MCc042P1</b>	RTL	4-cells, 32/64bit, double precision FPU multicellular processor core contains ALU in each cell. Performance of the core is 24 MFlops/MHz. Calculated value of power consumption on 180nm is 9 mW/MHz.
<b>MCc080P1</b>	RTL	8-cells, 32bit, fixed point multicellular processor core contains ALU in each cell. Performance is 8 MIPS/MHz. Calculated value of power consumption on 180nm is 4 mW/MHz.
<b>MCc162P1</b>	RTL	16-cells, 64bit, double precision FPU multicellular processor core contains ALU in each cell. Performance of MCc162P1 is 96 MFlops/MHz. Calculated value of power consumption on 180nm is 9 mW/MHz.

### MULTICLET P2

Processor core MULTICLET P2 is oriented at maximum **Performance** and simultaneous reduction of power consumption on the basis of multicellular architecture, which gives the core properties of natural implementation of parallelism in the processing process. MULTICLET P2 is fully synthesizable.

Nomenclature	Implementation	Description
<b>MCc042P2</b>	RTL	4-cells, 32/64bit, double precision FPU multicellular processor core contains ALU in each cell. Performance of the core is 24 MFlops/MHz. Calculated value of power consumption on 180nm is 9 mW/MHz.

### MULTICLET C1

Multicellular processor core MULTICLET C1 is oriented at ultra-low power **Consumption** and simultaneous reduction of power consumption on the basis of multicellular architecture and possesses the ability of natural implementation of parallelism. Architecture is fully synthesizable during program processing without the use of specialized standard cell libraries. MULTICLET P2 is fully synthesizable.

Nomenclature	Implementation	Description
<b>MCc040C1</b>	FPGA	4-cells, 32bit, fixed point processor core contains ALU in each cell. Performance is 3.2 MIPS/MHz. Calculated value of power consumption on 180nm is 213 $\mu$ W/MHz.

### MULTICLET R1

Processor core MULTICLET R1 is based on the unique multicellular architecture and provides natural implementation of parallelism. Architecture possesses the ability of dynamic **Reconfiguration** by means of which core's cells can simultaneously perform different operations. Processors based on multicellular architecture possess such ability. MULTICLET R1 is fully synthesizable.

Nomenclature	Implementation	Description
<b>MCc042R1</b>	SoC	4-cells, 32/64bit, double precision FPU multicellular processor core contains ALU in each cell. Performance of the core is 24 MFlops/MHz. Calculated value of power consumption on 180nm is 9 mW/MHz.

MCc042R1-1	SoC	4-cell, 32/64bit, double precision FPU multicellular processor core co the core is 24 MFlops/MHz. Calculated value of power consumption
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MULTICLET L1

Processor core MULTICLET L1 possesses Liveness ability and is oriented at maximum performance with low power consumption. The core is based on the unique multicellular architecture and possesses the attribute of non-destructive fault tolerance. Fault tolerance is an inborn attribute of the core and is resulted from core architecture. "Fault tolerance" is an ability of the core to continue to perform its functions even if 1, 2 or 3 cells fail to perform while the performance is reduced. Consequently, the core possesses a system-level fault tolerance called "Rad-Hard by Design". MULTICLET L1 is fully synthesizable.

Nomenclature	Implementation	Description
MCc042L1	RTL	4-cells, 32/64bit, double precision FPU processor core contains ALU and FPU. Calculated value of power consumption on 180 nm