INTEGRATED CIRCUITS, SILICON MONOLITHIC, CMOS, CELL-BASED ARRAY, BASED ON TYPE ATC18RHA ASIC FAMILY				**357A**
Procurement Specifications	Manufacturer	Nature of Approval	Supervising Authority	Initial Qualification Date
Generic ESCC 9000 Detail ESCC 9202/080, 9512/004, 9304/165, 9512/005	Microchip Technology Nantes France	Qualification	CNES	Apr 2019

The Technology Flow is described into the current QML document (REP006).

9202/080	Integrated circuits, silicon monolithic, CMOS, cell-based array	Based on type ATC18RHA

Available standard components:

9512/004	Integrated Circuits, Silicon, 32-bit SPARC Processor	Based on type AT697F
9304/165	Integrated Circuits, Silicon, monolithic, CMOS digital, Field Programmable Gate Array, 280000 gates	Based on type ATF280F
9512/005	Integrated Circuits, Silicon, monolithic, SPARC V8 GNSS Controller	Based on type AT991

INTEGRATED CIRCUITS, CMOS, CELL-BASED ARRAY, BASED ON ATMX150RHA ASIC FAMILY				**359A**
Procurement Specifications	Manufacturer	Nature of Approval	Supervising Authority	Initial Qualification Date
Generic ESCC 9000 Detail ESCC 9202/083	Microchip Technology Nantes France	Qualification	ESA/ESTEC	Apr 2019
		Remarks		

The Technology Flow is described into the current QML document (REP006).

The qualified range includes variants 75 to 164 from ESCC 9202/083 (Flat-Substrate package).

9202/083	Integrated circuits, CMOS, cell-based array. Ph2, Digital only, up to 22Mgates, 5ML+ thick metal layer.	Based on type ATMX150RHA

INTEGRATED CIRCUITS, SILICON, MONOLITHIC, RADIATION-HARDENED 32-BIT ARM CORTEX-M7 MICROCONTROLLER	**372A**

Procurement Specifications	Manufacturer	Nature of Approval	Supervising Authority	Initial Qualification Date
Generic ESCC 9000 Detail ESCC 9512/006	Microchip Technology Nantes France	Qualification	ESA/ESTEC	May 2021
		Remarks SAMRH71 rev.D (variant 01) has been replaced by SAMRH71 rev.E (variant 02) having enhanced ESD and SEL performances.		

Qualified range:

Detail spec	Variant Number	Based on Type	Case	Terminal Material and Finish	Weight max g	Total Dose Radiation Level Letter
9512/006	02	SAMRH71E	CQFP-256	D2	18	R [100krad(Si)]

Operating Temperature Range (°C): -55 to +125

INTEGRATED CIRCUITS, SILICON, MONOLITHIC, RADIATION-HARDENED 32-BIT ARM CORTEX-M7 MICROCONTROLLER (SAMV71RT)	**389**

Procurement Specifications	Manufacturer	Nature of Approval	Supervising Authority	Initial Qualification Date
Generic ESCC 9000 Detail ESCC 9512/007	Microchip Technology Nantes France	Qualification	CNES	July 2024
		Remarks		

Qualified range:

Detail spec	Variant Number	Based on Type	Case	Terminal Material and Finish	Weight max g	Total Dose Radiation Level Letter
9512/007	01	SAMV71RT	CQFP-144	D2	7	E [20krad(Si)]

Operating Temperature Range (°C): -55 to +125