



HYPERION TECHNOLOGIES

CP400.85 Processing Platform



DESCRIPTION

The CP400.85 processing platform is a high computing power, low energy consumption, general purpose processing platform. The Linux-based operating system allows users to run various algorithms as distinct, uploadable applications, enabling almost limitless flexibility. These can be run parallel to each other, in which case the OS takes care of the scheduling.

The platform consists of modified COTS components to withstand up to 25 krad of radiation. The fast boot time ensure maximum system up time for computing tasks.

Using the optional storage module, users can store up to 7.5 Gb of data in reliable, radiation tolerant storage, and can optionally store over 64 GB of bulk data on two SD-cards.

Depending on the carrier board (supplied separately), the module can be used as a powerful payload processor, or as a general purpose on-board computer.

HIGHLIGHTS

- Processor: ARMv7-A
- Clock frequency: 500 MHz
- Ram: 512 MB
- Storage: 512 MB of flash memory
- Linux-based operating system, with additions for improved radiation tolerance. Other operating systems on request.
- Plug-and-play ready design
- Primary components radiation tolerant to over 25 krad (Si) (TBC)
- Optional: Companion board with up to 7.5 Gb of radiation tolerant storage and over 64 GB of bulk data storage
- Low mass: 7 g
- Low power: < 1000 mW peak
- Module dimensions: 20 x 50 x 10 mm



SPECIFICATIONS

Performance				
Processing power		~750		DMIPS
Clock frequency		500		MHz
Main memory		512		MB
Main storage		512		MB
Dimensions				
Outer dimensions		50 x 20 x 10		mm
Mass		7		g
Environmental				
Operating temperature		- 45 to + 85		°C
Electrical specifications				
	Min.	Typ.	Max.	
Supply voltage	3.1	3.3	5	V
Power consumption				
	Min.	Typ.	Max.	
Idle	<TBD>	<TBD>	<TBD>	mW
Nominal ²	<TBD>	550	<TBD>	mW
Peak	<TBD>	-	1000 ³	mW

¹To be confirmed

²When running a Fibonacci algorithm

³Theoretical limit

MECHANICAL CHARACTERISTICS



CP400.85 outer dimensions [mm]

For pricing, delivery, configuration and ordering information please contact Hyperion Technologies B.V. at info@hyperiontechnologies.nl, or visit Hyperion Technologies' website at www.hyperiontechnologies.nl.