PRESS RELEASE

3D PLUS memory modules integrated on four onboard computers used on the SpaceX CRS-10 mission.

BUC, France, February 20th, 2017 – Launched on February 19th, 2017 from NASA's Kennedy Space Center in Florida, CRS-10 is a Cargo Resupply mission to the International Space Station: the tenth launch contracted by SpaceX under NASA's Commercial Resupply Services contract. In collaboration with the Department of Defense Space Test Program of Houston, this mission will deliver almost 5,500 pounds of science and research, crew supplies and vehicle hardware to the orbital laboratory.

The STP-H5/ISEM (STP-Houston 5, ISS SpaceCube Experiment Mini) payload includes four different types of onboard computers that integrate 3D PLUS' parts: NASA's SpaceCube v1.0 used as the Communication Interface Box for interfacing to the ISS data services and to several experiments; SpaceCube v2.0 for controlling the Raven Instrument, a tech demo to show the ability to track in-bound vehicles to the ISS; SpaceCube v2.0 Mini, a slightly reduced capability version of the SpaceCube v2.0 that controls the ISEM experiment, which in itself hosts a few NASA and DoD experiments; and the CHREC Space Processor (CSP), a new hybrid-processing technology developed by the NSF (National Science Foundation) CHREC (Center for High-Performance and Reconfigurable Computing) with direction from NASA..

A 3D PLUS 32Gb NAND Flash module is used for mass data storage in each CSP, providing for high density, radiation tolerant, non-volatile storage with endurance of 100K Write/Erase cycles per sector as well as 10 years of data retention time.
3D PLUS' 4Gb DDR I has been selected as part of the SpaceCube FPGA processing complex because users are able to achieve a high density memory architecture with less area (up to 75% board area saving) while employing an easy assembly process thanks to its SOP package.
3D PLUS' 128Mb PROM product also contributed to the CRS-10 mission by allowing a higher density, non-volatile memory with 20 years data retention time. 3D PLUS' PROM modules are used in the SpaceCube designs as an extremely reliable memory for storing the configuration bit stream for several high performances, reconfigurable FPGAs.

About 3D PLUS:

3D PLUS is a French SME, world leader in the design and manufacturing of high-performance and high-reliability miniaturized components utilizing a unique 3D vertical interconnect technology.

With more than 100,000 modules in space and a production capacity of about 20,000 space qualified modules per year in its facility nearby Paris, 3D PLUS continues to build on its heritage as a key solutions provider to a majority of stakeholders of the global space industry for telecommunications, Earth observation, navigation, launch vehicles and human spaceflight, science missions, small satellites and satellite constellations.

Contact: Pierre-Eric BERTHET +33 6 07 01 12 23 peberthet@3d-plus.com