CTBT Science and Technology Conference 2021 (SnT2021)



ID: P3.1-524 Type: e-Poster

Board: a new module for very low-consumption timing applications

Thursday 1 July 2021 11:45 (15 minutes)

CEA/DAM, in partnership with the startup Fullscale, has developed a compact board, targetted to easily integrate any equipment with accurate dating needs.

Based on GNSS reception to get an absolute time reference anywhere in the world, the Timing Board provides standard PPS signal and NMEA frames, and optionnally a stabilized 4 MHz clock. Its extra-small size and very low consumption (<40 mW) allow it to be embedded in any kind of device, such as compact digitizers or digital sensors.

The Timing Board module offers a very high stability without GNSS reception: the maximum drift is \pm -20 ppb over a wide temperature range [-20°C; \pm 70°C].

This module meets the PTS requirements in terms of timing and will be integrated in SMAD and MB3d digitizers soon.

Promotional text

Timing Board: a new module for very low-consumption timing applications with very high accuracy

Primary author: LICTEVOUT, Jean-Christophe (Commissariat à l'énergie atomique et aux énergies alternatives (CEA), France)

Presenter: LICTEVOUT, Jean-Christophe (Commissariat à l'énergie atomique et aux énergies alternatives (CEA), France)

Session Classification: T3.1 e-poster session

Track Classification: Theme 3. Verification Technologies and Technique Application: T3.1 - Design of Sensor Systems and Advanced Sensor Technologies