

SPACE TRANSPORTATION SOLUTIONS AND INNOVATIONS SYMPOSIUM (D2)
Future Space Transportation Systems Technologies (5)

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NEXT GENERATION AVIONICS SYSTEM OF CHINESE FUTURE LAUNCH VEHICLE

Abstract

One new conception avionics system of launch vehicle is proposed according to the current technology trend. Aimed at efficient, low-cost and reliable launch, the avionics system scheme is designed as following: 1) The rocket-borne devices are miniaturization designed. 2) The vehicle performs check-outs intelligently and autonomously. 3) The connection between rocket and ground facilities is simplified remarkably. 4) The launch facilities and operation is compacted greatly. 5) Launch control and management is mobile for the wireless networks utilized. We believe that these innovative concepts will be suitable for future launch vehicles.