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Ten years experience of operating tiny fanless severs as EPICS I/O controllers for J-PARC Main Ring

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J-PARC Main Ring (MR) deployed tiny fanless servers as EPICS I/O controllers (IOCs). During the construction phase of J-PARC MR in 2007, VME single board computers (VME-SBCs) were introduced as IOCs. Subsequently, it was found that the majority of the control targets were network devices and a VME bus was not mandatory. Pilot installation of tiny fanless servers as IOCs was carried out in 2014. Full-scale deployment began in 2015 and the transition from VME-SBCs to those small fanless servers was completed by 2023. This paper reviews the experience of operating the tiny fanless servers and discusses the future prospects.

Footnotes

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