EVIDEN
an atos business

Security Bulletin

AST2600 RoT left unconfigured in BullSequana XH2140

Author(s)	:	Eviden PSIRT
Reference	:	PSIRT-270
Created	:	23 January 2025
Version	:	2.7
Status	:	Remediation
TLP Classification	:	CLEAR
Document date	:	17 February 2025
Keywords	:	CVE-2024-46933

TLP:CLEAR

Sources may use TLP:CLEAR when information carries minimal or no foreseeable risk of misuse, in accordance with applicable rules and procedures for public release. Subject to standard copyright rules, TLP:CLEAR information may be shared without restriction.

FOR PUBLIC USE

List of changes

Version	Date	Description
~~1.0~~ 0.1	2023/10/25	First ~~remediation~~ neutralization version
0.2	2023/12/17	Update to Eviden template. Renumbering to fit with new Eviden template.
0.3	2024/01/19	Updated Estimated Time of Availability
0.4	2024/09/02	Updated Estimated Time of Availability
0.5	2024/09/19	CVE id - CVE-2024-46933 added
1.6	2025/01/17	Changed information about fix version and status for Remediation.
2.7	2025/02/17	TLP changed for CLEAR

Executive summary

The AST2600 BMC SoC embarks some hardware security features which needs to be programmed through a One-time-Programmable (OTP) mechanism. Leaving the AST2600 unconfigured paves the path to a bricking attack by activation of hardware secure boot. It appears that some BullSequana XH products were shipped without proper OTP programming.

Vulnerability Info

CVE No.	CVSS Score	Type of Vulnerability
CVE-2024-46933	7.2	CWE-1269: Product Released in Non-Release Configuration AV:N/AC:H/PR:H/UI:N/S:C/C:N/I:H/A:H/E:F/RL:T/RC:C

Using the SoC vendor programming tools, it is possible on the unlocked component to program the One-Time-Programmable memory of the BMC SoC. As this part of the memory is used by Hardware Security Functions, the programming of the OTP by a malevolent actor could lead to a permanent denial of service on the SoC.

Affected products

Products	Fixed version	Status	Comments
BullSequana XH2140	C4EM-125: OMF_C4E 101.05.0014	Fixed	Official fix (TS 69.02)

Although Eviden makes effort to provide accurate and complete information, Eviden shall not be liable if the above table is incomplete or erroneous. During its

vulnerability analysis process, the information in this document is subject to change without notice to reflect new results of this analysis.

TBD (to be defined) indicates that a new technical state fixing the vulnerabilities is under study.

Unpatched means that the vulnerability is presumably present, but there is no plan to provide a fix. This can be investigated on demand.

Recommendations

Eviden recommends applying its Technical States upgrade on its servers as soon as they are made available.

Available Vendor Patches

No validated patch is available at the time.

Technical States links for Eviden servers are reminded in the table below.

Product	Technical State link
Bull Sequana XH2000	https://support.bull.com/ols/product/platforms/hw-extremcomp/sequana/xh2000/dl/pkgf/pkg

Available Workarounds

A hotfix can be implemented by Eviden support upon demand.

Available Mitigations

A root access to the BMC through ssh is needed to exploit the vulnerability. This is not enabled in usual configuration.

Available Exploits/PoC

The full attack path has been confirmed by Eviden PSIRT.

Eviden is not aware of any exploitation of the reported vulnerabilities.

References

None.

Glossary of terms

Term	Description
Mitigation	Refers to a setting, common configuration, or general best-practice, existing in a default state that could reduce the severity of exploitation of a vulnerability
Neutralization	The neutralization phase is the decision-making process during which the risk posed by an incident is evaluated.
PoC	Proof of Concept
Remediation	The remediation phase ends with the delivering of a qualified solution/update fixing the vulnerability without regression.
TI	Threat Intelligence
TLP	Traffic Light Protocol (TLP) FIRST Standards Definitions and Usage Guidance — Version 2.0. https://www.first.org/tlp/
Workaround	Refers to a setting or configuration change that does not correct the underlying vulnerability but would help block known attack vectors before you apply the update

About this document

Eviden continuously monitors the security of its products. This Security Bulletin is shared under the constraints of the FIRST Traffic Light Protocol version 2.0 (TLP) to bring attention of owners of the potentially affected Eviden products. Eviden recommends that all product owners determine whether the described situation is applicable to their individual case and take appropriate action.

Although Eviden makes effort to provide accurate and complete information, Eviden shall not be liable for technical or editorial errors contained in this Bulletin. The information provides is provided "as is" without warranty of any kind. To the extent permitted by the Law, neither Eviden nor its affiliates, subcontractors or suppliers will be liable for incidental damages, downtime cost, lost profits, damages relating to the procurement of substitute products or services, or damages for loss of data, or software restoration. Product and company names mentioned herein may be trademarks of their respective owners.

The information in this document is subject to change without notice. The version of this document will be incremented according to the changes:

- Neutralization security bulletins are numbered 0.x
- Privately disclosed Remediation security bulletins are numbered 1.x
- Publicly disclosed Remediation security bulletins are numbered 2.x

Updated versions of this document can be found on:

- https://support.bull.com/ols/product/security/psirt

About Atos

Atos is a global leader in digital transformation with 105,000 employees and annual revenue of c. € 11 billion. European number one in cybersecurity, cloud and high-performance computing, the Group provides tailored end-to-end solutions for all industries in 69 countries. A pioneer in decarbonization services and products, Atos is committed to a secure and decarbonized digital for its clients. Atos is a SE (Societas Europaea) and listed on Euronext Paris.

The purpose of Atos is to help design the future of the information space. Its expertise and services support the development of knowledge, education and research in a multicultural approach and contribute to the development of scientific and technological excellence. Across the world, the Group enables its customers and employees, and members of societies at large to live, work and develop sustainably, in a safe and secure information space.

About Eviden[1]

Eviden is a next-gen technology leader in data-driven, trusted and sustainable digital transformation with a strong portfolio of patented technologies. With worldwide leading positions in advanced computing, security, AI, cloud and digital platforms, it provides deep expertise for all industries in more than 47 countries. Bringing together 53,000 world-class talents, Eviden expands the possibilities of data and technology across the digital continuum, now and for generations to come. Eviden is an Atos Group company with an annual revenue of c. € 5 billion

---

[1] Eviden business is operated through the following brands: AppCentrica, ATHEA, Cloudamize, Cloudreach, Cryptovision, DataSentics, Edifixio, Energy4U, Engage ESM, Evidian, Forensik, IDEAL GRP, In Fidem, Ipsotek, Maven Wave, Profit4SF, SEC Consult, Visual BI, Worldgrid, X-Perion. Eviden is a registered trademark. © Eviden SAS, 2023.