> CYBER SECURITY' PORTFOLIO

EMBEDDED SOLUTIONS FOR CYBER SECURITY

DAVE Embedded Systems

The issue of IT security is increasingly central to the development and maintenance of devices that must be connected in the field in order to operate at their best and provide the required services. Offering its customers the opportunity to rely on a partner able to recommend and subsequently manage and develop solutions in this sense is essential and DAVE Embedded Systems offers a range of services to be able to safely manage the products that its customers will want to use in the field.

> SECURE BOOT

Surely in the embedded field it is essential nowadays to be able to guarantee that the software that is operated on board an edge device is certainly produced and supplied by the company that conceived it and placed it on the market.

DAVE Embedded Systems is able to support its customers in this area by accelerating the introduction of solutions and good practices for the correct management of the software in the field and especially during the deployment in the factory and in the field of both the first installation and subsequent updates.

> BSP MAINTENANCE

The correct management and maintenance of the Board Support Package is another fundamental element for the correct management of a project, taking into account possible Cyber Security problems.

Using the state of the art in this field, DAVE Embedded Systems is able to offer its customers support and services for the monitoring of the vulnerabilities and the updating of the BSP period in order to minimize the risk of offering the possibility of violating the systems. in the field and above all remotely.

> ON FIELD DEPLOYMENT

The deployment of Cyber Security strategy requires to implement solutions taking into account the manufacturing process. DAVE Embedded Systems as manufacturer has a huge experience on this and support its customers during the development of strategies for both outsourcing and internal supply chain processes.

It is in fact essential to analyze the production process and define it from the beginning of the project in order to structure the management of all product production phases in safe conditions, avoiding the sharing of sensitive data externally.

> CERTIFICATION

Thanks to the availability of official regulations on Cyber Security it is now possible to develop solutions that are asseverable to these standards.

DAVE Embedded Systems offers solutions and support for the design of solutions in compliance with these standards which represent an added value for the end customer who, being able to declare it, raises the perceived quality of its product.

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> SECURE BOOT
Below are the services included in the standard package. Depending on the project specifications, the list can be modified accordingly:
> Secure Boot Process Vulnerability Analysis
> Secure Boot implementation in U-Boot
> Secure Boot implementation in the kernel
> Evaluation of solutions to secure the product at the Root File System and application level
> Design and implementation of public and private key management solutions
> Implementation of secure update mechanisms in the field
> Implementation of mechanisms for converting and updating keys in the field

> BSP MAINTENANCE
The functions available for the maintenance and management of BSPs from a Cyber Security perspective are listed below:
> Vulnerability monitoring service
> Periodic updating of the BSP with security patches
> Product integration service with the mainline kernel
> Definition of partitioning and updating strategies to optimize update and maintenance systems

> ON FIELD DEPLOYMENT
In the field of security, it is essential to offer design and implementation services that integrate the best good practices available for field deployment:
> Realization of public and private key management machines
> Creation of cloud certificate deplyment systems at production subcontractors
> Management of secure systems for production rework in the presence of Secure Boot enabled
> Cloud-based automated product provisioning management service

> CERTIFICATION
Cyber Security certification represents a not negligible added value that should be pursued in order to obtain the greatest value for your product.
> Development process according to IEC-62443
> Support to the certification process
> Support for the production of the necessary documentation