

Company Overview

Leading System-on-Module Design and Manufacturer







About Variscite

Variscite is a leading
System-on-Modules
designer and manufacturer.

Key Figures:

Key Figures:	2003
Target Markets:	Embedded products
Customer base:	Over 7000 customers WW
Production:	Internal production facilities with a total capacity of >3500Ku/yr
Sales:	Over 2M units/year with steady YoY growth

- Local offices in Europe and North America
- ISO 9001:2015 and ISO13485:2016 certified



About Variscite

Variscite current positions

- A leader in the ARM-based SoM market, with extensive customer base and pipeline
- 20 years in the SoM market supporting over 7000 WW customers
- The most diversified ARM based product portfolio, with extensive longevity and compliance policies
- The first SoM vendor in NXP's Platinum membership and its partner on the entire i.MX8 and i.MX9 product lines
- Internal production lines for stable availability and solid lead times



The Challenge





Market says MORE

More bells and whistles

Market is moving to "Smart devices". Basic UI just doesn't cut it

More connectivity

IoT - Everything is now connected

More support

Complexity of the processors and entire system design requires higher level of hardware and mainly software support

More features

OEMs continuously introduce new generations and derivative with new features, more graphics and integrated intelligence



For example:

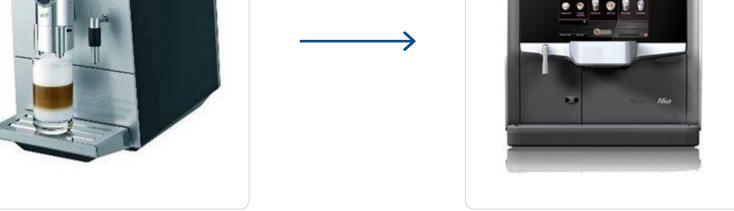
The Evolution of a coffee vending machine



- High performance application processor
- 1080p graphics and video rendering
- Video stream via Wireless network
- NFC based wireless payment

- Basic Microprocessor
- Alpha numeric display

 No connectivity • Mechanical coin-based payment

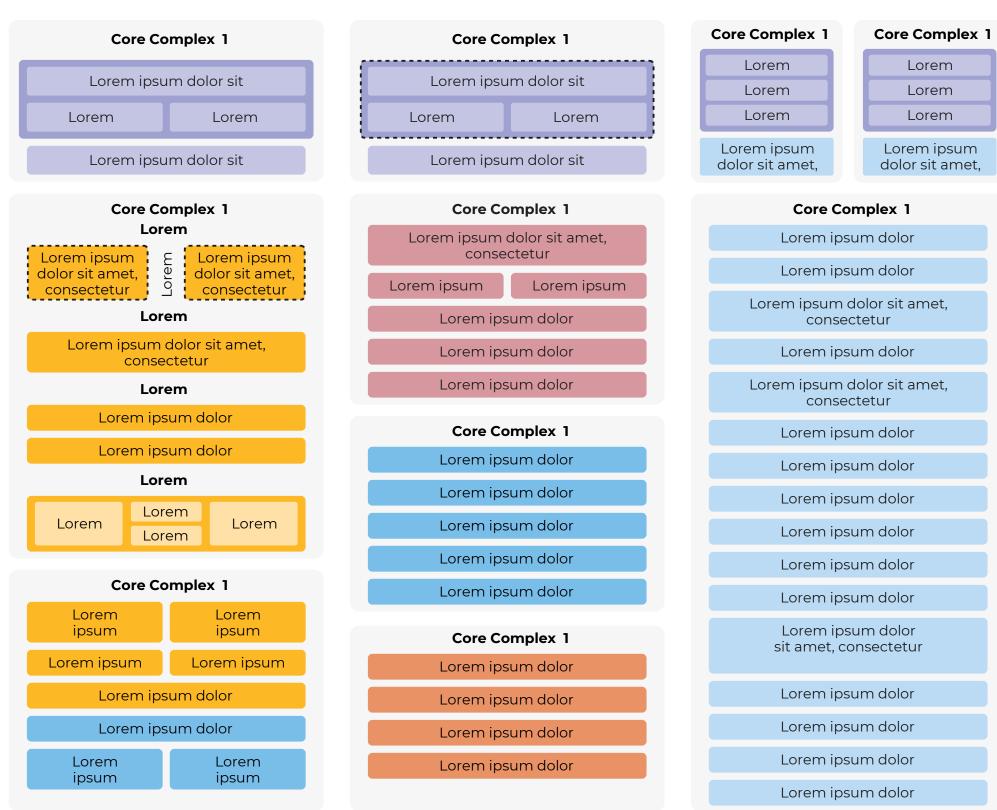




The problem

Product designs are getting more complex

i.MX8 Quad Max Processor Block Diagram





The solution

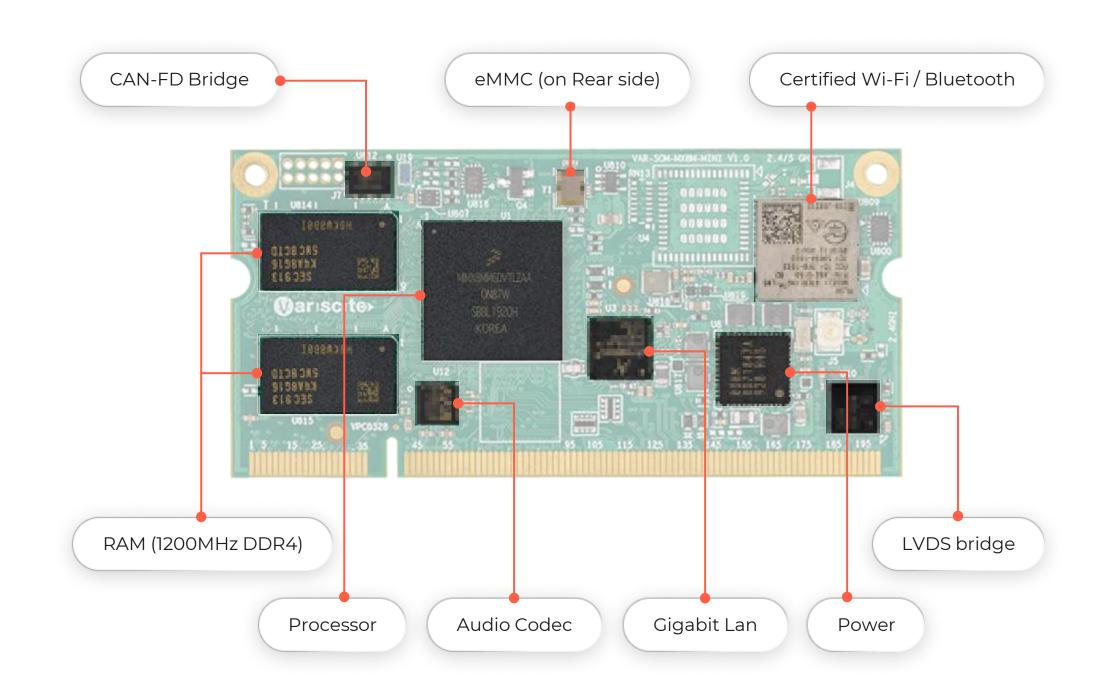
SoM:

System-On-Module

Example shown:

VAR-SOM-MX8M-MINI

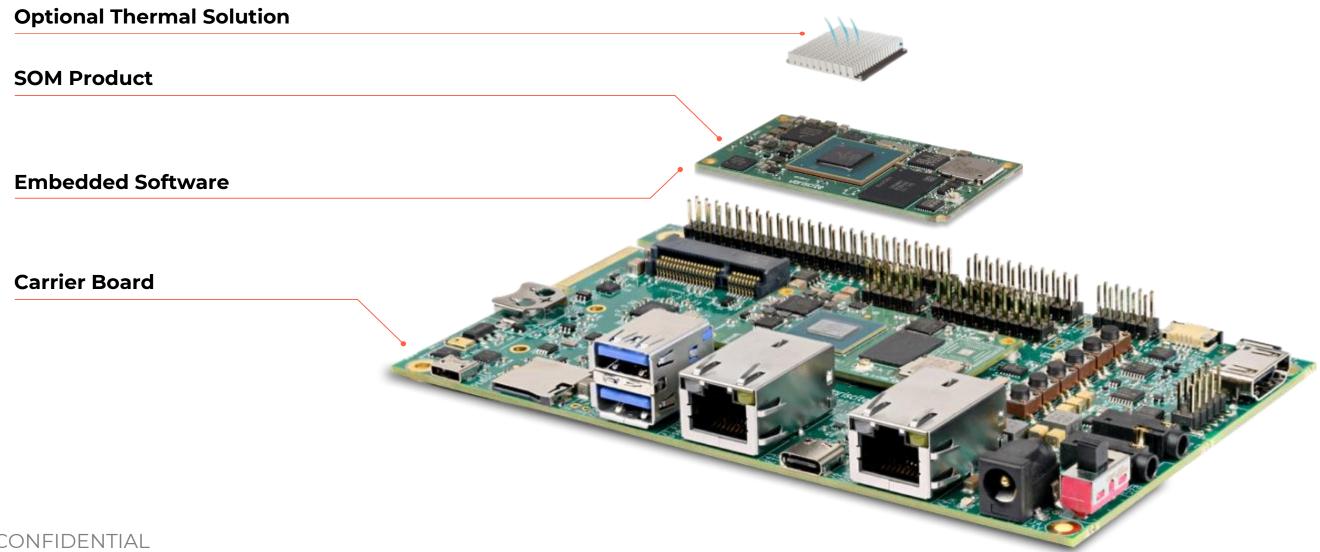
Also available DART-MX8M-MINI with optimized size of $55.0 \times 30.0 \text{ mm}$





What is a System on Module:

SOM and Carrier structure





The solution: Variscite SoM

Off-The-Shelf stability, Custom design flexibility

- Fast time to market
- Reduce R&D cost
- Scalable and Upgradeable with Variscite pin2pin families
- 100% yield All the time
- Production-ready hardware and software
- Free support for customers: Customer Portal, GitHub, Variwiki, CAD
- Tested and used by hundreds of customers proven high reliability and low risk!
- In-house production for stable availability and lead times
- Long term longevity up to 15 years



Solutions for all market segments

Variscite customized solutions are engineered and manufactured for all industrial sectors. Fully integrated systems provide the critical components to optimize your product design, development and manufacture. Variscite experts have developed end-to-end solutions that deliver core technology capabilities across a unique range of industries.

- Medical devices
- PoS
- Wearable Computing
- IoT

Smart home

Industrial controller

Access control

- Active sensors
- Charging stations
- Sport equipent









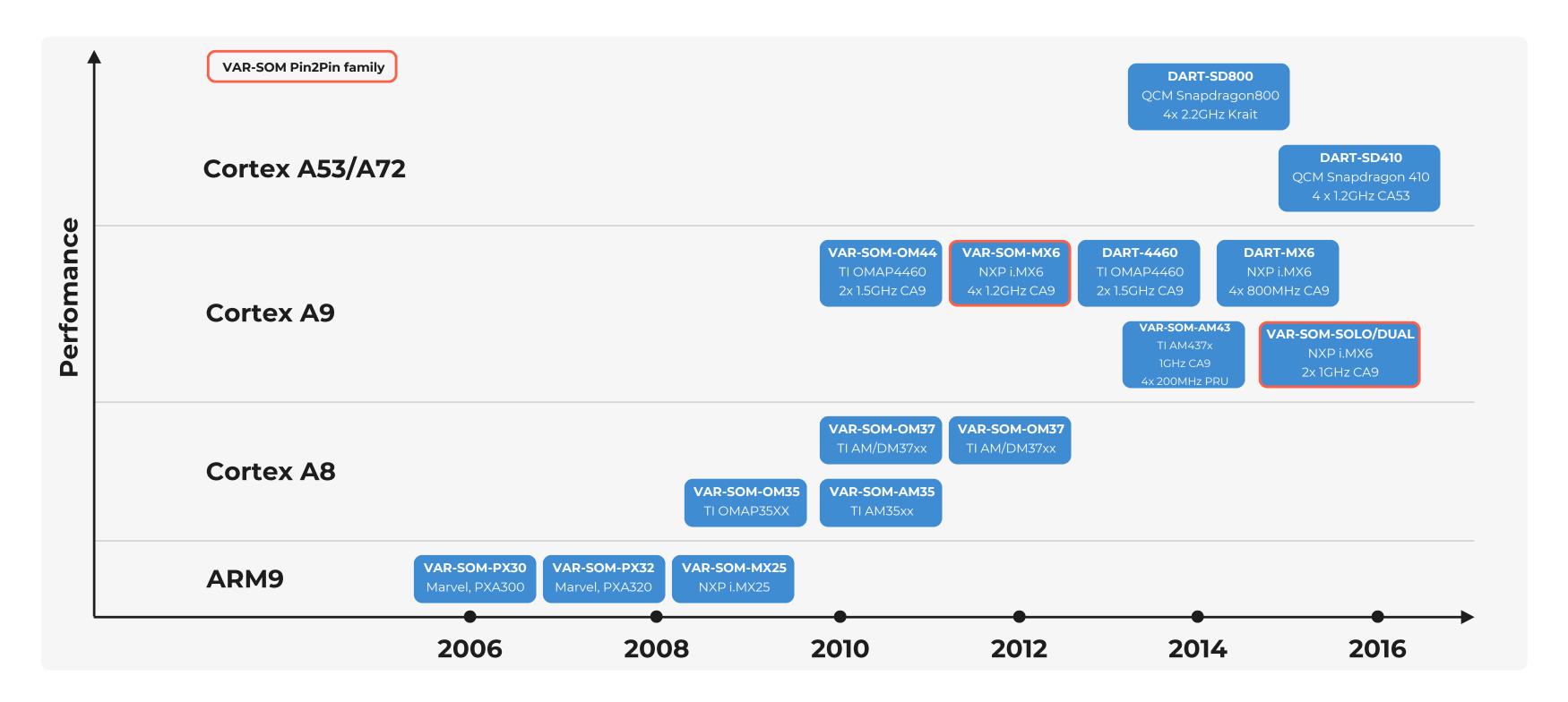


Variscite Portfolio



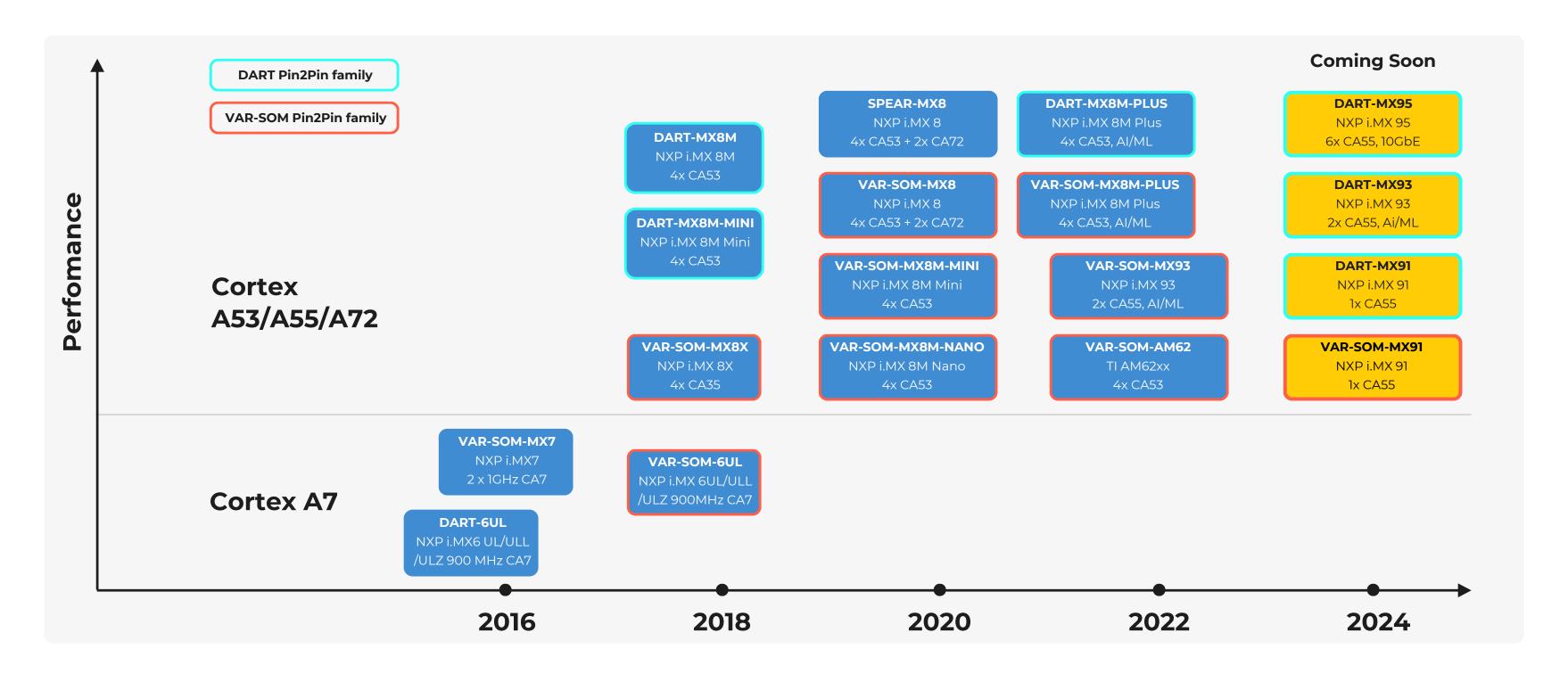


Variscite: The Widest ARM SoM Portfolio – Legacy Products





The Widest SoM Portfolio: Core Products and New Releases





VAR-SOM Pin2Pin product family

Highly scalable across multiple processors and cost/performance options 200-pin SO-DIMM edge connector



VAR-SOM-MX91 NXP I.MX 91

1X 1.4GHZ CORTEX-A55



VAR-SOM-AM62
TI AM625X
4X 1.4GHZ CORTEX-A53



VAR-SOM-MX93 NXP I.MX 93 2X 1.7GHZ CORTEX-A55



NXP I.MX8M PLUS 4X 1.8GHZ CORTEX-A53



VAR-SOM-MX8M-MINI

NXP I.MX8M MINI

4X 1.8GHZ CORTEX-A53



NXP I.MX8M NANO 4X 1.5GHZ CORTEX-A53



VAR-SOM-MX8

NXP I.MX8 2X 1.8GHZ

CORTEX-A72 + 4X 1.2GHZ

CORTEX-A53



VAR-SOM-MX8X

NXP I.MX8X

4X 1.2GHZ CORTEX-A35



VAR-SOM-MX6

NXP I.MX6

4X 1.2GHZ CORTEX-A9



NXP I.MX6 2X 1GHZ CORTEX-A9



VAR-SOM-6UL

NXP I.MX6 UL/ULL/ULZ

900MHZ CORTEX-A7

Note:

pin2pin compatibility depends on pinmux





DART Pin2Pin product family

Optimized size and extended pinout options Three 90pin board2board connectors





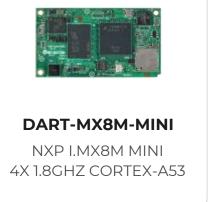








NXP I.MX8M 4X 1.5GHZ CORTEX-A53



Note:

pin2pin compatibility depends on pinmux





Variscite Customer Support

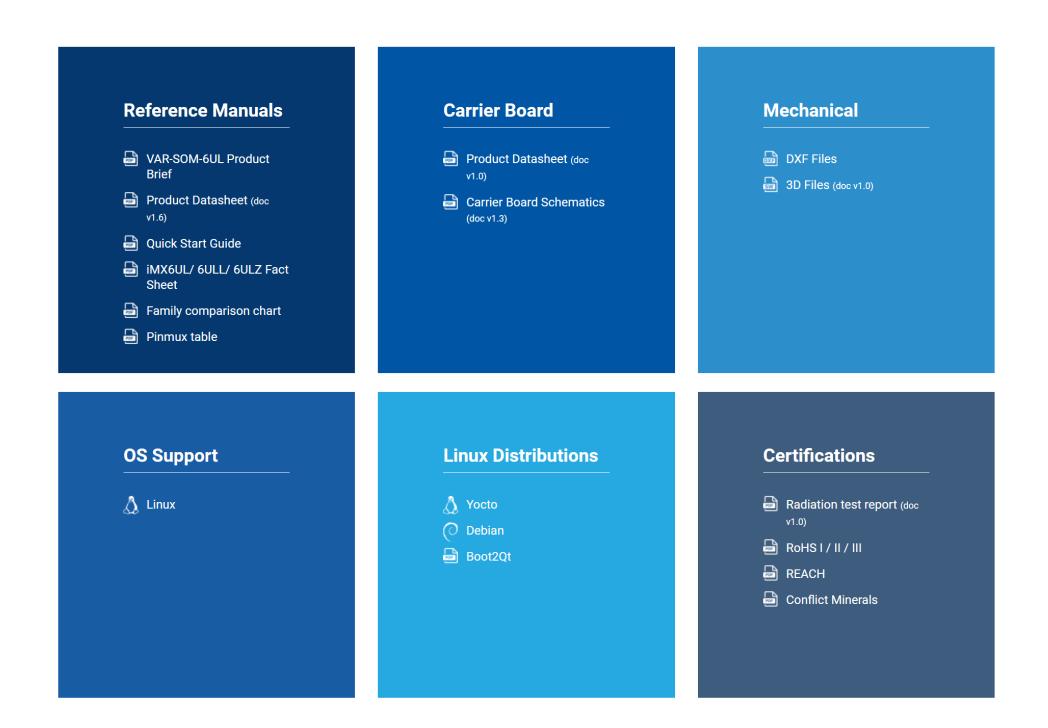




Variscite customer support

- ✓ Quick start guide
- ✓ Product brief
- **✓** Datasheet
- **✓** Schematics
- ✓ 2D/3D Mechanical files
- ✓ EMC radiation report

Complete online documentation: www.variscite.com



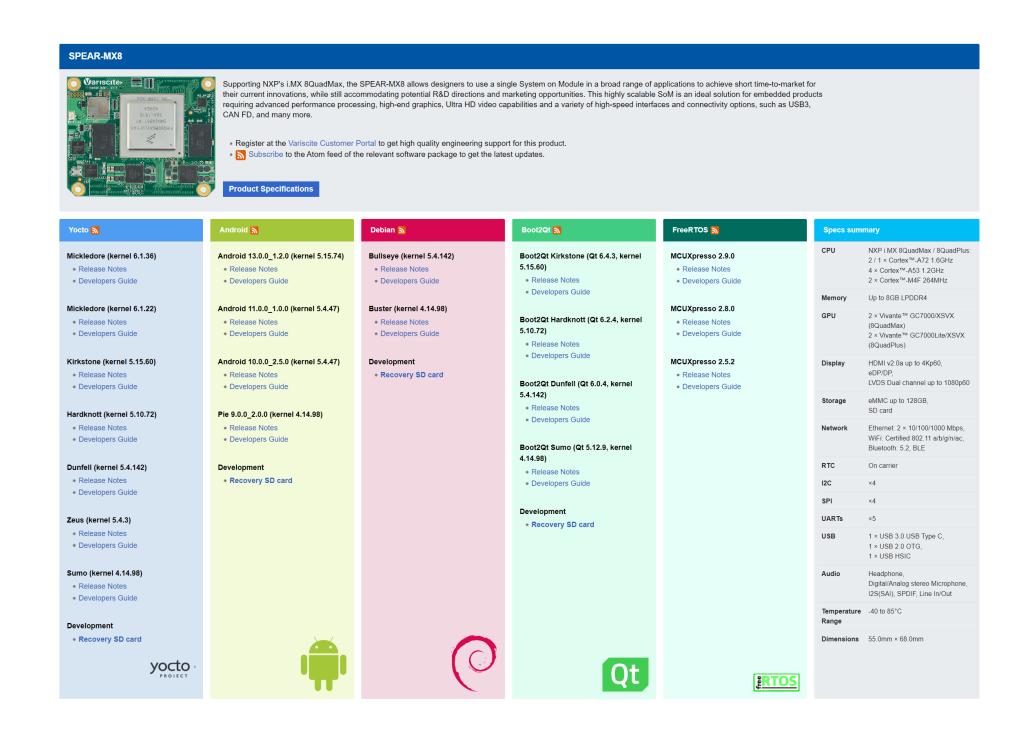
VARISCITE PROPRIETARY AND CONFIDENTIAL

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Variscite customer support

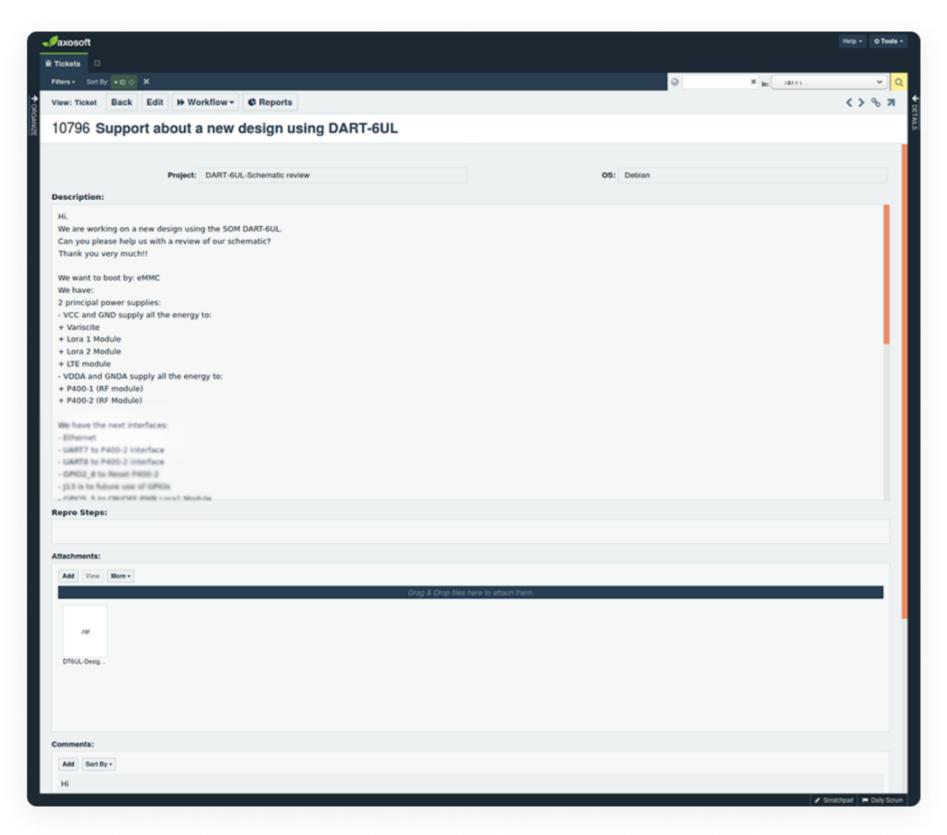
Comprehensive software wiki: www.variwiki.com





Variscite customer support

Customer portal: Online ticketing systems, direct link to Variscite R&D experts





Variscite Production

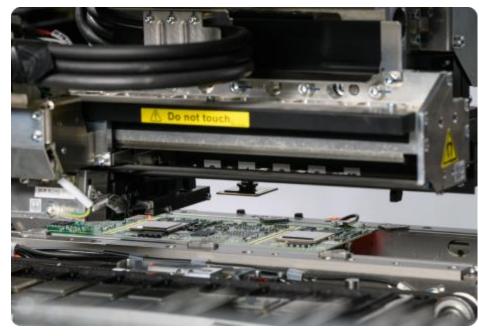




State of the art production lines, ISO 13485 certified

- Assembled components traceability
- IPC610 certified team
- Complete boundary scan and functional testing on 100% of the SOMs
- Test log traceability for failure analysis











New Production Facilities with > 3.5M units/year









Variscite: One Stop Shop from Concept to Mass Production

- Production ready HW and SW
- Full span of configurable SoM solutions
- Carrier boards used as Reference & Production
- Full development kit
- Customized design:
 - Custom carrier designs
 - Custom driver/BSP







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Longevity & Compliance





Variscite - Securing your long term supply

- Providing the most generous longevity commitment on its SoM solutions
- De-facto supporting thousands of customers for more than 20yrs
- Internal production lines with at least 50% capacity overhead and in-line redundancy
- External fallback production plants in different countries as a part of a backup disaster plan
- Optional Escrow agreement to provide another layer to secure customer's production continuity



Product Longevity Policy

- Variscite is not EOL its product "for convenience"
- Providing 10-15 years longevity from product launch

System on Module	Longevity
VAR-SOM-AM62	2038
VAR-SOM-MX93	2038
DART-MX8M-PLUS	2036
VAR-SOM-MX8M-PLUS	2036
VAR-SOM-MX8M-NANO	2034
VAR-SOM-MX8M-MINI	2034
VAR-SOM-MX8	2034
SPEAR-MX8	2034
VAR-SOM-MX8X	2035
DART-MX8M-MINI	2034
DART-MX8M	2033
VAR-SOM-6UL	2031
DART-6UL	2031
DART-MX6	2027
VAR-SOM-MX7	2026
VAR-SOM-MX6	2035
VAR-SOM-SOLO	2035
VAR-SOM-DUAL	2035

Expected

System



Product compliance policy



ISO 13485:2016

Variscite production is performed at fully ISO 13485 compliant facilities, satisfying an international customer and regulatory requirements for a broad range of industries including medical devices and related services. To download Variscite's ISO 13485:2016 certification



ISO 9001:2015

Variscite is a fully certified ISO 9001:2015 company, as a cornerstone for Variscite's overall Quality Control methodology of developing and producing top quality products. From early design concept and up to production and customer service, Variscite sets the bar for the highest quality products and services in the SOM industry. To download Variscite's ISO 9001:2015 certification



UL 94V-0

UL 94 is the Standard for safety of flammability of plastic materials released by Underwriters Laboratories (UL) of the USA. The standard classifies plastics according to how they burn in various orientations and thicknesses. All Variscite's products are based on PCBs and components classified as UL 94V-0, which is the most flame-resistance class under the UL 94 standard.



ISO 14001:2015

Variscite has achieved the internationally recognized ISO 14001:2015 certification awarded for an organization's environmental performance. By meeting the certification's standards, Variscite takes a significant step towards fulfilling its social and environmental responsibility while being up to date with the latest best-practice in environmental management. To download Variscite's ISO 14001:2015 certification



RoHSI/II/III

Variscite certifies to the best of its knowledge that Variscite's products are compliant with the threshold requirements of the European Union Restriction on Use of Hazardous Substance Directive 2002/95/EC ("RoHS 1"), Directive 2011/65/EU ("RoHS 2"), Directive (EU) 2015/863 amendment of Directive 2011/65/EU ("RoHS 3") and amendment (EU) 2017/2102 to RoHS 2 - all collectively denefer to as "RoHS", as well as the China Management Methods for controlling Pollution by Electronic Information Products ("China RoHS").



REACH

Variscite produces "Articles" as defined in REACH regulation and not chemicals which need to be registered according to the REACH regulation. There is no intended release of substances subjected to REACH and therefore registration does not apply to our products. The European Chemicals Agency (ECHA) Candidate List of the Substances of Very High Concern (SVHC) is monitored regularly by Variscite with its approved suppliers. As far as we know, our products do not currently contain any of these SVHCs in a concentration above 0.1% of the weight of the product. To download Variscite's REACH statement.



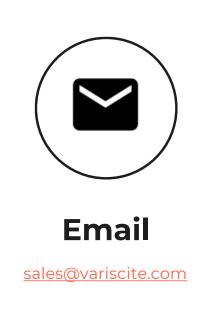
Conflict Minerals

We have received several inquiries from our customers in respect to the Conflict Minerals issue addresses in Section 1502 of the Dodd-Frank Wall Street Reform and Consumer Protection Act that was passed by the US Congress in July 2010. Variscite does not purchase 3T&G directly from smelters or mines, so we must rely on the source information provided by our suppliers. We will continue to assess the conflict status of our supply chain and, if identified, will eliminate the use of supplier materials that include 3T&G from conflict sources as soon as commercially practicable. To download Variscite's Conflict Mineral letter.



Useful links













Thank You

