

# Syslogic **Product Overview**

Embedded Computer | HMI Systems | Single Board Computer | Railway Computer

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# Is there anywhere you can still find true industrial-grade electronics?

Cheaper, cheaper and even still cheaper – this guiding principle has ruled the consumer market for many years and long since made its way into the industrial arena. The implications are fatal. **Industrial customers from all sectors complain about premature field failures in the electronic systems they have purchased.** The results for the affected companies are, besides loss of sales and image, a great deal of frustration.

Additional aggravation comes from industrial suppliers that arbitrarily announce the end of life of electronics that have been designed in. The resulting expensive requalifications cut into already slim profit margins.

The fact is, the influence of manufacturing philosophies from the consumer market has led to the situation where true industrial electronics are almost impossible to find – but this is a trend that Syslogic is doing everything it can to counteract.

Syslogic is one of the few companies in the embedded sector that **develops and manufactures all of its own embedded computers and touch panel computers.** This company, with subsidiaries in Germany and Switzerland, has its own development and design departments as well as two manufacturing sites with in-house SMD assembly. This depth of manufacturing, combined with more than 25 years of experience in the embedded market, make Syslogic a reliable partner – especially when customer-specific modifications are needed.

## **Constant end-of-life announcements are a disaster.**

That's why we offer availability of from 10 to 20 years.  
Expensive requalifications then become unnecessary.

Dr. Ivo Trajkovic, Design Engineer Syslogic



# Four reasons why it pays to invest in true industrial electronics

## **Sylogic offers reliability – you can rest at ease**

The embedded computers and touch panel computers from Sylogic offer you security and many years of functional reliability. Because Sylogic does not employ trouble-prone components such as batteries and rotating parts, its units are maintenance-free. In addition, Sylogic uses industrial-grade solid state disks instead of conventional hard disk drives. Thanks to ingenious designs, Sylogic products stand due to their high functional reliability, even in continuous operation under extreme conditions.

**You will feel safe and secure.**

## **Sylogic will spark your enthusiasm – you will enjoy working with embedded computers**

An environment involving continual shocks, vibrations and extreme temperature fluctuations – no problem whatsoever for Sylogic embedded computers. Starting early in the development phase, Sylogic keeps very demanding operating requirements in mind when selecting all its components. In doing so, Sylogic relies totally on boards without any cables and also uses only the highest quality connectors. Units intended for mobile applications are equipped with proven M12 connectors. With these steps, Sylogic guarantees reliable operation of your embedded computers in vehicles or mobile equipment.

**You will be extremely pleased and satisfied!**

## **Sylogic will be there when you need them – they know what will be happening ten years from now**

Sylogic guarantees availability of at least 10 years for your embedded computers and HMI systems. Upon request, Sylogic offers 20 years of “form, fit and function.” This promise is something you will rarely see in the electronics industry, and for many customers it is a key reason to invest in true industrial electronics. This extended availability is made possible by the careful selection of components starting early in the development phase. For example, Sylogic uses only true industrial processors. **You can look to the future without any worries.**

1

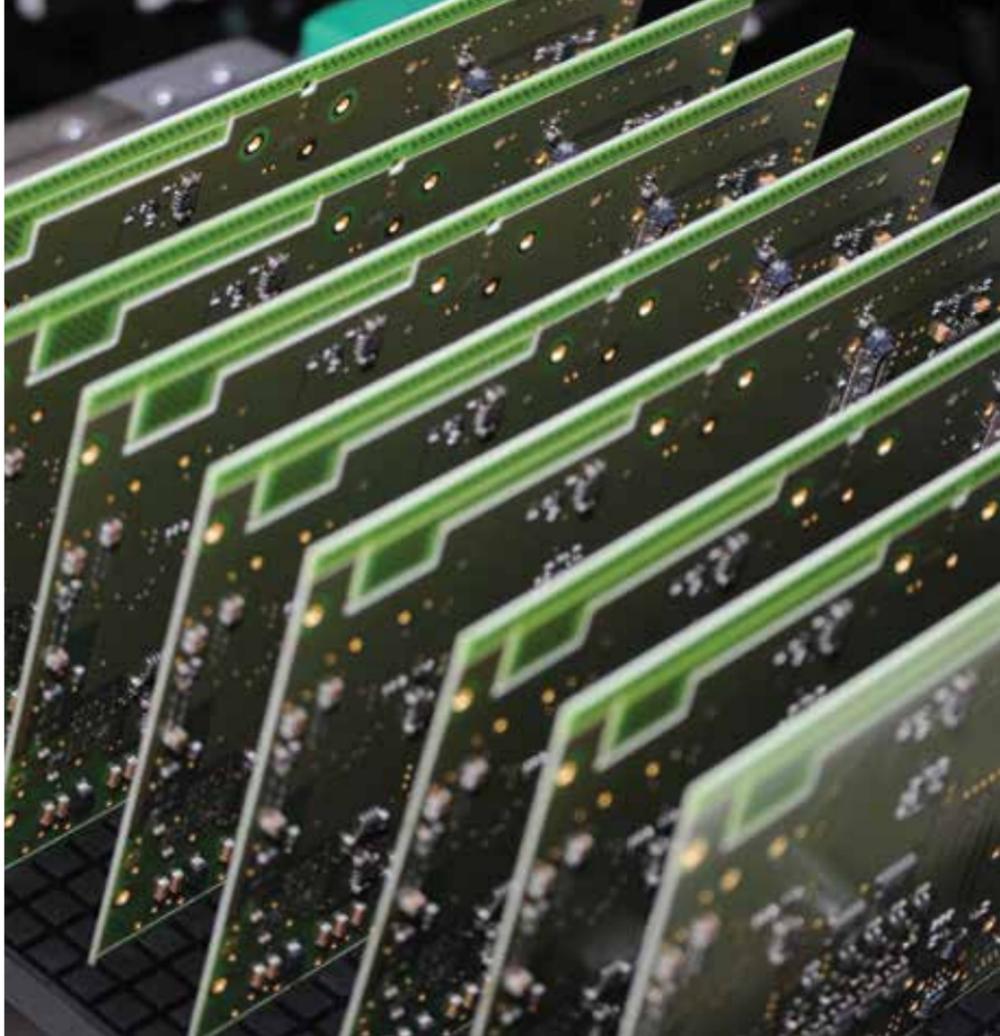
2

3

**Sylogic offers convenience – you get a well-matched complete package**

In addition to intelligently designed equipment, Sylogic places great emphasis on customer convenience. Sylogic delivers all its embedded computers and touch panel computers with preconfigured operating systems. Because of this, customers profit from straightforward, easy software integration and fast commissioning. In addition to technical aspects, Sylogic also pays close attention to making sure its units have a visually pleasing, intelligent design. In short, Sylogic will win you over with a complete, well-matched complete package. **You will enjoy working with our products!**

4





### NETSBC 41 Series

NETSBC 41 Series embedded single board computers are equipped with an AMD Vortex86DX2 processor. The Vortex processor is backwards compatible. This means that the frequency can be reduced – for example, in retrofitting applications – so that the state-of-the-art single board computer is also compatible with older software. All components – including the processor – are specified for an extended temperature range of between –40 and +85 °C and are suitable for outdoor applications, in vehicles and in railway engineering. IPC/NETIPC-41 single board computers are also available with an optional protective coating.



### NETSBC 71 Series

NETSBC-71 embedded single board computers are equipped with a high-performance Intel Atom E6x0T processor. The Atom-E processors impress thanks to their low-power design. Only minimal waste heat is produced as a result of the low power consumption, which has a positive effect on the MBTF values (mean time between failures) on the single board computer. Syslogic has also carried out numerous vibration tests and shock tests, all of which the NETSBC-71 single board computer passed with flying colors. The embedded single board computers are thus ideally suited for use in vehicles or mobile machines.

<b>Processor</b>	Vortex86DX2
<b>CPU Clock</b>	Scalable, 25 to 800 MHz
<b>Memory</b>	1 GB DDR2 SDRAM
<b>Interface</b>	Ethernet, USB, RS232, RS422/485, CAN 2.0b, PC/104, VGA, LPT
<b>Operating system</b>	Windows Embedded Standard, Linux Debian 6.0, MS DOS, a.o

<b>Processor</b>	Intel Atom™ E6x0T
<b>CPU Clock</b>	Up to 1.6 GHz
<b>Memory</b>	Up to 2 GB DRAM
<b>Interfaces</b>	Ethernet, USB, RS232, RS422/485, CAN 2.0b, PC/104, DVI-A/D, PROFIBUS, EtherCAT
<b>Operating system</b>	Windows Embedded Standard, Linux Debian 6.0, Android, MS DOS, RTKernel a.o.



### Compact MS Series

The embedded box PCs in the Compact MS Series meet stringent demands in terms of their robustness, reliability and durability. The box PCs with 184 MHz ARM9 processor come with 32 MB SDRAM and an additional 32 MB flash memory. The Compact MS box PCs can be freely programmed and are suitable for use with operating systems such as Linux or Windows CE. As embedded computers without compromises, the fanless box PCs in the Compact MS Series are designed for an extended temperature range of between -40 and +70 °C. Box PCs are often used as protocol converters for control or monitoring systems, such as those used in traffic-control applications.



### Compact XS Series

The embedded box PCs in the Compact XS Series are among the smallest embedded computers on the market. They can be configured with a wide range of interfaces, including Ethernet, EtherCAT, RS-232 and RS-485. Additionally, the embedded box PCs can also be combined with common field bus systems such as PROFIBUS, PROFINET, CAN etc. With their X86 platform, the box PCs are suitable for use with operating systems such as DOS, Linux, Windows CE or Embedded Standard.

<b>Processor</b>	ARM
<b>CPU Clock</b>	184 MHz
<b>Memory</b>	32 MB SDRAM on Board
<b>Interfaces</b>	Ethernet, USB (intern), RS232, RS422/485
<b>Operating system</b>	Linux

<b>Processor</b>	LX800, Vortex86DX, ARM9
<b>CPU Clock</b>	Scalable, 184 MHz–800 MHz
<b>Memory</b>	UP to 256 MB RAM
<b>Interfaces</b>	Ethernet, USB, RS232, RS422/485, CAN 2.0b, PC/104, VGA, PS/2, PROFIBUS, EtherCAT
<b>Operating system</b>	Windows Embedded Standard, MS DOS, Linux, VxWorks, RTOS a.o.

**Angry faces, lots of aggravation – there's no need for any of it.**

When it comes to our embedded computers, we place the focus on high reliability, starting right at the development phase.

Hannah Frei, Inside Sales Representative Syslogic



COMPACT SL

www.syllog.com.au



### Compact S Series

The embedded computers in the Compact S Series are equipped with a Vortex86DX2 processor. This has been developed specifically for embedded applications. As a main product feature, the Vortex86DX2 processors combine all main functions on a single chip. Thanks to the highly integrated design, the energy requirements on the embedded computer can be reduced in addition to saving space. On the other hand, the low power consumption also results in an increase in the MBTF values (mean time between failures) on the embedded computers.

<b>Processor</b>	Vortex86DX2
<b>CPU Clock</b>	Scalable, 25 to 800 MHz
<b>Memory</b>	1 GB DDR2 SDRAM
<b>Interface</b>	Ethernet, USB, RS232, RS422/485, CAN 2.0b, PC/104, VGA, LPT
<b>Operating system</b>	Windows Embedded Standard, Linux Debian 6.0, MS DOS, a.o.



### Compact M Series

An advantage of the Compact 41 embedded computer is its unique interface structure. Embedded computers have CAN, USB, RS-232 and RS-485 interfaces, can be equipped with up to three Ethernet interfaces and can be expanded with WLAN, GPS, GSM and Bluetooth modules, plus a PC/104 card. In addition to their robust construction, a comprehensive monitoring system ensures reliable operation of the embedded computers.

<b>Processor</b>	Vortex86DX2
<b>CPU Clock</b>	Scalable, 25 to 800 MHz
<b>Memory</b>	1 GB DDR2 SDRAM
<b>Interface</b>	Ethernet, USB, RS232, RS422/485, CAN 2.0b, PC/104, VGA, LPT
<b>Operating system</b>	Windows Embedded Standard, Linux Debian 6.0, MS DOS, a.o.



### Compact SL Series

The wide front on the Compact SL Compact industrial PCs offers numerous connection possibilities. The industrial PCs are also equipped with state-of-the-art, high-performance Intel Atom E6x0T processors. The SL industrial PC/Compact 71 are suitable for demanding automation or control applications. Thanks to the fanless industrial design, the industrial PCs are resistant to vibrations, shocks, heat and cold. As with all embedded computers from Syslogic, the industrial PCs in the Compact SL Series have long-term availability. Time-consuming, cost-intensive requalifications are thus unnecessary, which in turn guarantees low total operating costs.



### Compact ML Series

The Compact ML computers combine the flexible connection possibilities with the high-performance Intel Atom E6x0T processor platform. The Compact ML industrial PCs work without any moving parts. They are suitable for 24/7 continuous operation and are approved for an extended temperature range of between  $-40$  and  $+85$  °C on a component level. Syslogic has also carried out numerous vibration tests and shock tests, all of which the Compact ML industrial PC passed with flying colors. The embedded computers are thus ideally suited for use in vehicles or mobile machines.

<b>Processor</b>	Intel Atom™ E6xxT
<b>CPU Clock</b>	Up to 1.6 GHz
<b>Memory</b>	Up to 2 GB DRAM
<b>Interfaces</b>	Ethernet, USB, RS232, RS422/485, CAN 2.0b, PC/104, DVI-A/D, PROFIBUS, EtherCAT
<b>Operating system</b>	Windows Embedded Standard, Linux Debian 6.0, Android, MS DOS, RTKernel a.o.

<b>Processor</b>	Intel Atom™ E6xxT
<b>CPU Clock</b>	Up to 1.6 GHz
<b>Memory</b>	Up to 2 GB DRAM
<b>Interfaces</b>	Ethernet, USB, RS232, RS422/485, CAN 2.0b, PC/104, DVI-A/D, PROFIBUS, EtherCAT
<b>Operating system</b>	Windows Embedded Standard, Linux Debian 6.0, Android, MS DOS, RTKernel a.o.

## **Shocks. Vibrations. Downtime!**

Not here. Our embedded computers use robust M12 connectors and have no moving parts – ensuring reliable operation in vehicles.

Roger Newbould, Development Engineer Syslogic





### RPC (rugged PC) Compact 71 Series

With the RPC (rugged PC) Compact 71 Series, Syslogic has once again raised the bar for robust embedded box PCs. The housing on the rugged PC is made from hard-anodized aluminum. It is resistant to dust, water and chemicals and is thus assigned to protection class IP67. Under the housing, the Compact 71 rugged PC boasts a scalable Queensbay platform from Intel. In addition, all Compact 71 rugged PCs are equipped with a real-time clock (RTC) with Gold Cap for maintenance-free functionality. Another feature of the robust embedded computers is the M12 plug, which is able to withstand even strong vibrations. Rugged PCs are thus ideally suited for use in railway applications or in vehicles and wind energy plants.

<b>Processor</b>	Intel Atom™ E6xxT
<b>CPU Clock</b>	Up to 1.6 GHz
<b>Memory</b>	Up to 2 GB DRAM
<b>Interfaces</b>	Ethernet, USB, RS232, RS422/485, CAN 2.0b, PC/104, VGA
<b>Operating system</b>	Windows Embedded Standard, Linux Debian 6.0, Android, MS DOS, RTKernel a.o.



### Railway Computer Compact 71

With the Railway Computer Compact 71 railway computer, Syslogic offers an embedded computer that has been developed solely for use in railway applications. The embedded railway computers work without any moving parts and are designed for an extended temperature range of between  $-40$  and  $+85$  °C thanks to their consistent industrial design. They are also equipped with a M12 plug which is able to withstand strong vibrations. The Syslogic Railway Computer Compact 71 thus meets all of the demands set by the rail industry in terms of resistance to shocks and vibrations. They are certified according to the EN50155 TX Class railway standard.



### Railway Computer RPC Compact 71

With the RPC Compact 71 railway computer, Syslogic offers an embedded computer that has been developed solely for use in railway applications. The embedded railway computers work without any moving parts and are designed for an extended temperature range of between  $-40$  and  $+85$  °C thanks to their consistent industrial design. The railway computers are also equipped with an IP67 housing and M12 plug which is able to withstand strong vibrations. The Syslogic devices thus meet all of the demands set by the rail industry and are certified according to the EN50155 TX Class railway standard.

<b>Processor</b>	Intel Atom™ E6xxT
<b>CPU Clock</b>	Up to 1.6 GHz
<b>Memory</b>	Up to 2 GB DRAM
<b>Interfaces</b>	Ethernet, USB, RS232, RS422/485, CAN 2.0b, PC/104, VGA
<b>Operating system</b>	Windows Embedded Standard, Linux Debian 6.0, Android, MS DOS, RTKernel a.o.

<b>Processor</b>	Intel Atom™ E6xxT
<b>CPU Clock</b>	Up to 1.6 GHz
<b>Memory</b>	Up to 2 GB DRAM
<b>Interfaces</b>	Ethernet, USB, RS232, RS422/485, CAN 2.0b, PC/104, VGA
<b>Operating system</b>	Windows Embedded Standard, Linux Debian 6.0, Android, MS DOS, RTKernel a.o.



## Embedded Retrofit Series

Innovations in the electronics branch are progressing rapidly. This process is so rapid that the mechanics on machines and systems often outlast their electrical components. In such cases, it is more economical to modernize and retrofit existing systems instead of replacing them completely. However, individual electronic components are often no longer available and no longer in production.

With their Embedded Retrofit Series, Syslogic is meeting this challenge. The various backwards-compatible single board computers, embedded computers and touch panel PCs can be connected to old systems without any problems, and without the need for software adjustments. As a system house, Syslogic is able to use the Embedded Retrofit Series to realize customized solutions quickly and with high levels of cost efficiency thanks to the modular design. In addition to the production of embedded computers and HMI systems, Syslogic also supports system integration at the customer.

### Retrofit embedded PCs and HMI systems

<b>Processor</b>	Diverse x86 and ARM
<b>CPU Clock</b>	Scalable up to 1.6 GHz
<b>Memory</b>	Up to 2 GB
<b>Interfaces</b>	Serial interfaces, parallel interfaces, video, audio, field bus, WiFi modules
<b>Operating system</b>	Windows, MS DOS, Linux, real time capable a.o.



### Projected Capacitive Touch Panel Series (built-in)

The Projective Capacitive Touch Panel Series (PCT Series) combines modern design with robust mechanics. In contrast to conventional resistive touchscreens, the PCT devices have an impact-resistant, scratch-resistant front. This means that the touch panel PCs ideally meet stringent industrial demands in terms of durability and robustness. They are also suitable for outdoor applications. With the state-of-the-art touch controller, the HMI systems support multi-touch applications. In addition to the industrial touch technology, the TFT/HBxxxPU71 touch panel PC also impresses thanks to its installed embedded computer manufactured in-house by Syslogic.



### Projected Capacitive Touch Panel Series (with switch)

The panel PCs in the Syslogic Projective Capacitive Touch Panel Series (PCT Series) can be fastened to systems or machines using a standardized VESA 100 bracket. The HMI systems in the PCT Series combine modern design with robust mechanics. In contrast to conventional resistive touchscreens, the PCT devices have an impact-resistant, scratch-resistant front. This means that the touch panel PCs ideally meet stringent industrial demands in terms of durability and robustness. With the state-of-the-art touch controller, the HMI systems support multi-touch applications.

<b>Display</b>	From 10.4 inch
<b>Processor</b>	Intel Atom™ E6xxT
<b>CPU Clock</b>	Up to 1.6 GHz
<b>Memory</b>	Up to 2 GB DRAM
<b>Interfaces</b>	Ethernet, USB, RS232, RS422/485, CAN 2.0b, PC/104, DVI-D, PROFIBUS, EtherCAT
<b>Operating system</b>	Windows Embedded Standard, Linux Debian 6.0, Android, a.o.

<b>Display</b>	From 10.4 inch
<b>Processor</b>	Intel Atom™ E6xxT
<b>CPU Clock</b>	Up to 1.6 GHz
<b>Memory</b>	Up to 2 GB DRAM
<b>Interfaces</b>	Ethernet, USB, RS232, RS422/485, CAN 2.0b, PC/104, DVI-D, PROFIBUS, EtherCAT
<b>Operating system</b>	Windows Embedded Standard, Linux Debian 6.0, Android, a.o.

## **The HMI system you need doesn't exist?**

Customizations, even in low volumes. As a manufacturer with our own design and development along with two manufacturing sites, we can respond quickly and flexibly to your requests.

Roger Gimmi, Head of Manufacturing Syslogic





### Projected Capacitive Touch Panel Series (with switch)

Both built-in and surface-mounted versions in the Projective Capacitive Touch Panel Series (PCT Series) can be expanded with customer-specific mechanical switches. The type and number of switches are configured according to customer requirements. Possibilities include emergency-stop switches, start/stop switches, release buttons or an additional USB port on the front of the device. All touch panel PCs in the PCT Series share modern industrial design, durable construction and a long service life. With the state-of-the-art touch controller, the HMI systems also support multi-touch applications.



### Resistiv Touch Panel Series

The Resistiv Touch Panel Series touch panel PC in the Resistive Touch Panel Series combines robust embedded technology with a compact display. The touch panel PC is thus suitable for use as a browser-controlled input panel or as a display in industrial surroundings. The resistive touch display is connected to a Syslogic embedded computer with Vortex86DX platform. This ensures high MBTF values (mean time between failures) thanks to its low power consumption. The touch panel PC also impresses thanks to its robust housing with IP65 protection on the front, plus its availability of at least ten years.

<b>Display</b>	From 10.4 inch
<b>Processor</b>	Intel Atom™ E6xxT
<b>CPU Clock</b>	Up to 1.6 GHz
<b>Memory</b>	Up to 2 GB DRAM
<b>Interfaces</b>	Ethernet, USB, RS232, RS422/485, CAN 2.0b, PC/104, DVI-D, PROFIBUS, EtherCAT
<b>Operating system</b>	Windows Embedded Standard, Linux Debian 6.0, Android, a.o.

<b>Display</b>	5.7 inch
<b>Processor</b>	Vortex86DX2
<b>CPU Clock</b>	Scalable, 25 to 800 MHz
<b>Memory</b>	1 GB DDR2 SDRAM
<b>Interfaces</b>	Ethernet, USB, RS232, RS422/485, CAN 2.0b, PC/104, VGA
<b>Operating system</b>	Windows Embedded Standard, Linux Debian 6.0, MS DOS, a.o.



### **MySyslogic – the smart component solution**

Syslogic has a wide range of available embedded products. Whether single board computers or HMI systems, the embedded products from Syslogic have a modular design and can thus be tailored individually according to the customer's wishes.

With over 25 years of experience as a system house on the embedded market, Syslogic implements customized solutions quickly and with high cost efficiency – even at small batch sizes of 50 pieces and up. With this in mind, Syslogic has launched the clever MySyslogic component solution.

**More information: [MySyslogic.com](http://MySyslogic.com)**

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