

## **PRELIMINARY - Product Brief**

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### **Blade Runner - Industrial Tablet Solution**

TES' **MAGIK-2 family** of platforms comprises various COM (Computer-on-Module) products as well as application specific carrier cards and associated software packages. Dedicated system solutions targeting certain application areas are composed of these aforementioned components and represent market ready but still customizable platforms. In particular, the following application areas are addressed:

- Human Machine Interface (HMI)
- Audio processing
- Video processing
- Video combined with graphics
- Network and Connectivity
- Wireless Remote Controls

These system solutions are reducing time-to-market and the risk of a product development significantly and are therefore the ideal basis for such endeavors.

All Magik-2 System Solutions are available as complete packages consisting of hardware and associated ready-to-go software. All software components are alternatively also offered as IP cores for use on existing hardware. Porting can be offered on request.

Standard operating system is Linux, but versions for Windows Embedded Compact 7 / 2013 or Android are available on request.

Product development made easy, with the industry leading, complete system solution packages from TES!

The **"Blade Runner" - Industrial Tablet Solution** consists of the following components:

- SMARC module based on an i.MX 6 applications processor from Freescale with Solo(M2-SM6-1S), dual lite core (M2-SM6-D2L), dual core (M2-SM6-2D) or quad core (M2-SM6-4Q) ARM Cortex A9 CPUs
- Application specific carrier card with a large variety of interfaces that allow the integration of the solution into a larger system context like e.g. in a commercial vehicle or transportation environment as a display based control panel or combined with video display functionality
- Ready-to-go software package with Linux/ Android OS, optimized BSP, middleware, media suites. Custom BSP adaptations can be offered on request.
- Mechanical enclosure (optional)

The **"Blade Runner" - Industrial Tablet Solution** leverages TES' outstanding expertise in multimedia and embedded control technologies, including the design of battery operated equipment. This expertise enables a market leading system performance.

One key value of TES' system solutions is the ready-to-go software package described above. The following operating systems (OS) are supported:

- **Linux** (standard)
- **Android 4.3 Jelly Bean** (standard)
- **Windows Embedded Compact 7 / 2013** (on request)
- **Any other RTOS** (on request)

The "Blade Runner" Industrial Tablet Solution can be customized according to customers' requirements. Adding / removing features of the carrier board and even changing the form factor is easily possible. This is also true for the display.

The standard package includes support for 7" and 10.1 "displays with LVDS input. However, other displays can be supported on request.

There is a huge variety of displays available on the market with a large range w.r.t. All video parameters like e.g. resolution, brightness, viewing angle etc. and the price ranges are equally wide. There are other aspects to be considered like

display product life cycle, which needs to be taken care of at the instant of design-in, in order to prevent early product obsolescence and associated redesign costs.

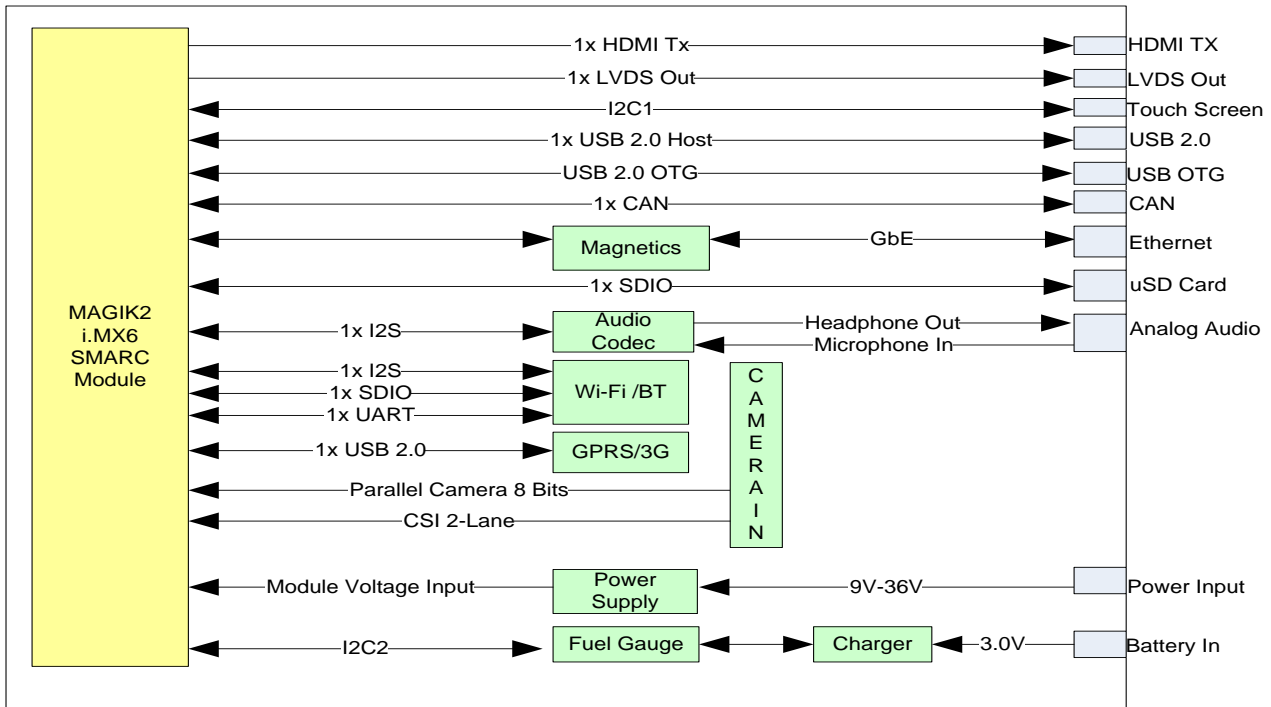
Therefore, in order to support our customers with an optimized solution, we consult our customers, but we leave the final display selection to them and thus can offer a real custom solution.

The same is applicable concerning the mechanical enclosure. The customers can use their own enclosure design or have TES develop an enclosure based on his corporate design rules and technical requirements.

Technical Information	"Blade Runner" Industrial Tablet System Solution
Processing Unit	<ul style="list-style-type: none"> <li>• TES i.MX6 System on Module (Quad/Dual/Dual Lite/Solo)</li> <li>• SMARC Complaint</li> </ul>
Video Output	<ul style="list-style-type: none"> <li>• 1x HDMI Out (HDMI 1.4a)</li> <li>• 1x LVDS Out (Single Channel 18/24 bits)</li> </ul>
Ethernet	<ul style="list-style-type: none"> <li>• 1x 10/100/1000 Mbps</li> <li>• M12 Ethernet Connectors</li> </ul>
CAN	<ul style="list-style-type: none"> <li>• CAN 2.0B Support</li> <li>• M12 CAN Connector</li> </ul>
USB Host	<ul style="list-style-type: none"> <li>• Standard USB 2.0 Host</li> <li>• Type A Connector</li> </ul>
USB OTG	<ul style="list-style-type: none"> <li>• Standard USB 2.0 OTG</li> <li>• micro AB Connector</li> </ul>
SDIO	<ul style="list-style-type: none"> <li>• Standard SD Card Support</li> </ul>
Wireless Connectivity	<ul style="list-style-type: none"> <li>• Wi-Fi 802.11n + BT 3.0</li> <li>• GPRS/3G</li> </ul>
Analog Audio	<ul style="list-style-type: none"> <li>• Microphone IN</li> <li>• Headphone OUT</li> </ul>
Camera	<ul style="list-style-type: none"> <li>• Parallel 8- Bit CMOS camera supported</li> <li>• 2- Lane Serial CMOS Camera supported</li> </ul>
Power Input	<ul style="list-style-type: none"> <li>• 9V-36V Input via M12 Connector</li> <li>• Li-Poly Battery Input(hand held applications)</li> </ul>
Temperature Range	<ul style="list-style-type: none"> <li>• Industrial</li> </ul>
RoHS	<ul style="list-style-type: none"> <li>• The hardware is RoHS compliant</li> </ul>



**Preliminary Block Diagram\***



\*Block diagram details are subject to change without notice. Check with TES for updated information.

Ordering Information		
Article	Part No.	Description
Tablet Solution Carrier Board	M2-CB-IND-TABLET-IT	Tablet Carrier Board Industrial Temperature Range
<b>SMARC Module alternatives</b>		
<b>MAGIK-2 SMARC Module</b> (single core)	M2-SM6-1S8M-0.5G-4G-IT-S	i.MX6 Solo, 800MHz, 512MB RAM, 4GBytes Flash, Industrial Temperature, 80mmx52mm
<b>MAGIK-2 SMARC Module</b> (dual core lite)	M2-SM6-D2L8M-0.5G-4G-IT-S	i.MX6 Dual Lite, 800MHz, 512MB RAM, 4GBytes Flash, Industrial Temperature, 80mmx52mm
<b>MAGIK-2 SMARC Module</b> (dual core)	M2-SM6-2D1G-1G-4G-IT-S	i.MX6 Dual, 1GHz, 1GB RAM, 4GBytes Flash, Industrial Temperature, 80mmx52mm
<b>MAGIK-2 SMARC Module</b> (quad core)	M2-SM6-4Q1G-1G-4G-IT-S	i.MX6 Quad, 1GHz, 1GB RAM, 4GBytes Flash, Industrial Grade, 80mmx52mm

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## **Sales Offices**

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