

FPGA Marketing Alert

Medical Imaging Solutions with PolarFire® FPGAs

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Unleashing Precision in Medical Imaging

Medical Imaging Solutions with PolarFire FPGAs is a transformative platform for the rapidly advancing world of medical diagnostics. Built on the foundation of PolarFire® FPGAs and SOCs, this solution stack offers unparalleled precision, power efficiency, and real-time processing—vital for enabling the next generation of medical imaging devices. With PolarFire's unique capabilities, medical systems can achieve the performance required for life-saving applications without sacrificing efficiency or reliability.

Key Selling Points for CEMs and ESEs

1. Power Efficiency for Longer Operation

Medical imaging systems, particularly portable ones, demand energy efficiency for extended operational time. **PolarFire® FPGAs and SOCs** are specifically engineered to consume up to 50% less power than competing devices, allowing for longer battery life and reduced need for thermal management. This is critical for devices used in intensive settings such as hospitals, emergency rooms, and remote diagnostics.

Selling Opportunity: Emphasize the ability to reduce overall system costs by eliminating the need for heat sinks and cooling systems, while increasing operational time for portable and battery-powered devices.

2. High-Resolution Image Processing and Real-Time Data

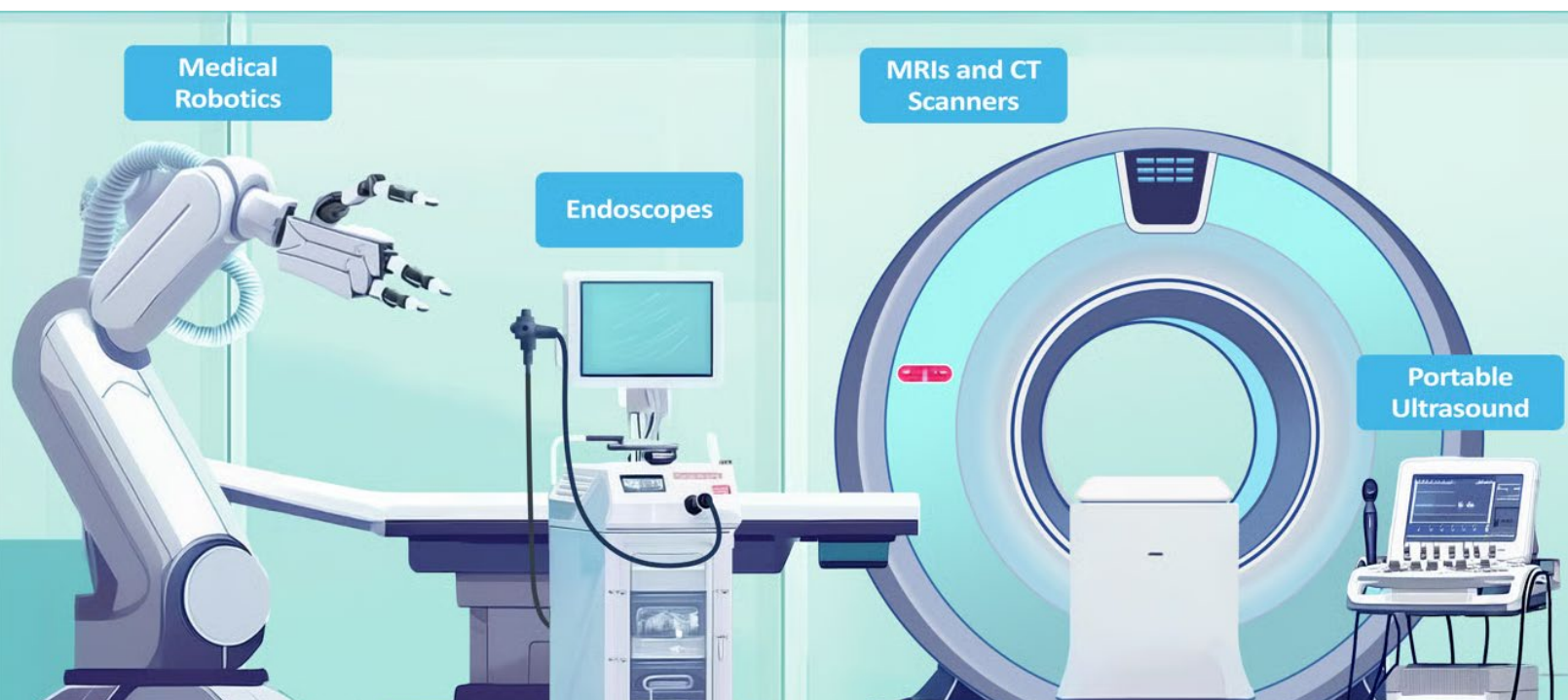
With the increasing complexity of diagnostic procedures, real-time and high-resolution imaging is essential. PolarFire® FPGAs & SOCs support these needs with high-resolution video & processing and real-time data management. Advanced interfaces like MIPI® CSI-2 enable seamless integration into medical devices, making the development of advanced imaging solutions faster and more reliable.

Selling Opportunity: Highlight the flexibility and real-time capabilities for high-end medical devices such as MRI, CT scanners, and ultrasound systems. PolarFire's processing power ensures that medical professionals receive accurate, real-time information essential for patient care.

3. Security and Reliability

Medical systems must maintain the highest levels of security and reliability due to the sensitive nature of patient data. PolarFire® FPGAs & SOCs provide advanced security features such as cryptographically secured supply chains and NIST-certified encryption algorithms, ensuring that medical imaging systems remain secure and trusted in any environment.

Selling Opportunity: Demonstrate the advantage of integrating a secure and reliable FPGA solution in medical systems that handle critical patient data, safeguarding intellectual property and personal health information.



Draminski Case Study: Real-World Impact

One success story of PolarFire® FPGA technology in action is the Draminski portable ultrasound system. Draminski, a leader in veterinary and human diagnostics, partnered with Microchip to create a portable, high-performance ultrasound machine. By using PolarFire® FPGAs, Draminski achieved longer battery life, reduced power consumption, and eliminated the need for active cooling, resulting in a highly effective and cost-efficient imaging device.

While this case study primarily focuses on veterinary applications, it demonstrates how PolarFire FPGAs enable medical systems to deliver accurate diagnostics, extended operational life, and greater portability.

Calls to Action

1. **Engage with Prospects:** Reach out to current and potential customers in the medical imaging space. Emphasize cost savings, energy efficiency, and security offered by Microchip's PolarFire® FPGAs & SOC's. Use your BD contacts to help develop opportunities.
2. **Leverage the Case Study:** Use the Draminski Case Study to showcase real-world applications of our FPGAs in imaging devices, reinforcing the advantages of longer battery life and compact design. Email it to potential customers and use it on social media to attract inquiries.
3. **Utilize Sales Tools:** Download and use the presentations available for FPGAs in Medical Imaging Solutions when engaging new prospects. Encourage customers to visit the dedicated webpage:
<https://www.microchip.com/en-us/solutions/medical/advanced-technology/medical-imaging/fpga>.

Together, we can accelerate the adoption of PolarFire® FPGA technology in medical imaging, driving innovation in healthcare and diagnostics.

Selling Resources

- **FPGAs in Medical Imaging Web Page:**
<https://www.microchip.com/en-us/solutions/medical/advanced-technology/medical-imaging/fpga>
- **Sales Presentation:**
[FPGA Medical Customer Presentation CEM v1](#)
- **ESE Technical Presentation:**
[FPGA Medical Field Training Presentation v1](#)
- **Case Study:** [Draminski Technology S.A.](#)

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