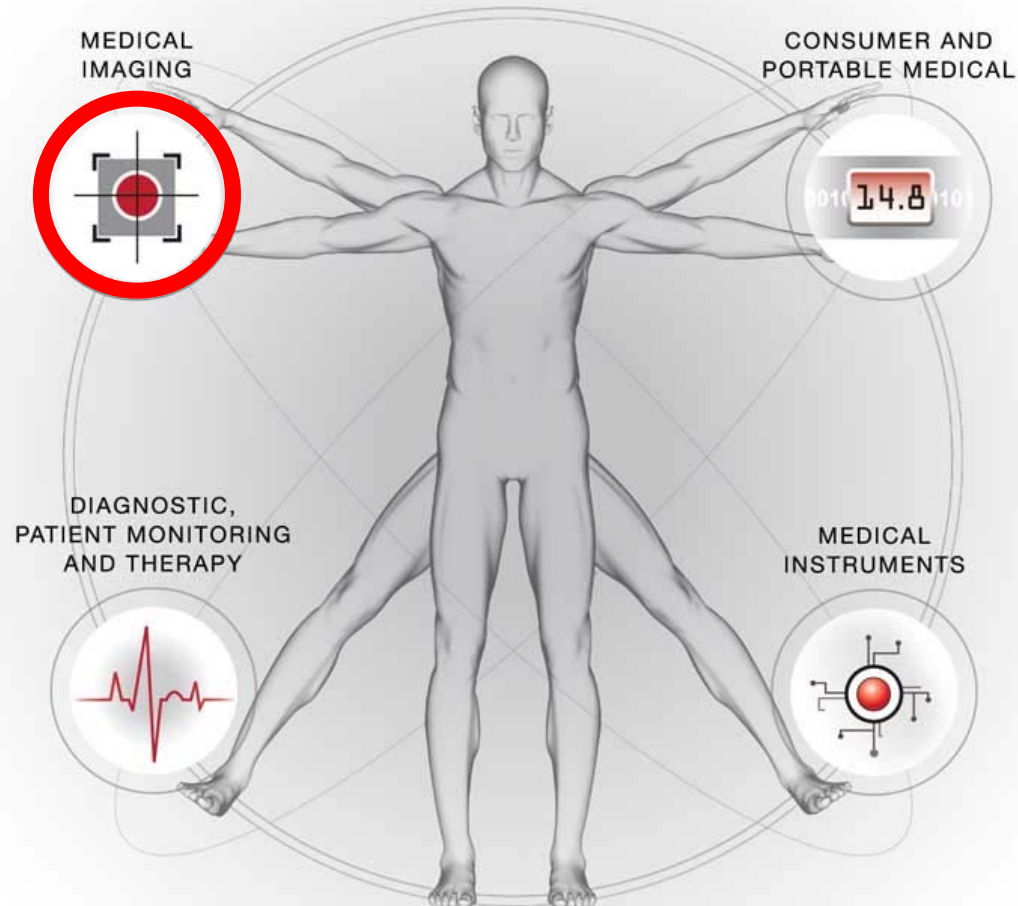


# **Embedded Processors Enable Faster Care, More Accurate Results for Medical Imaging Applications**

**Mark Nadeski**

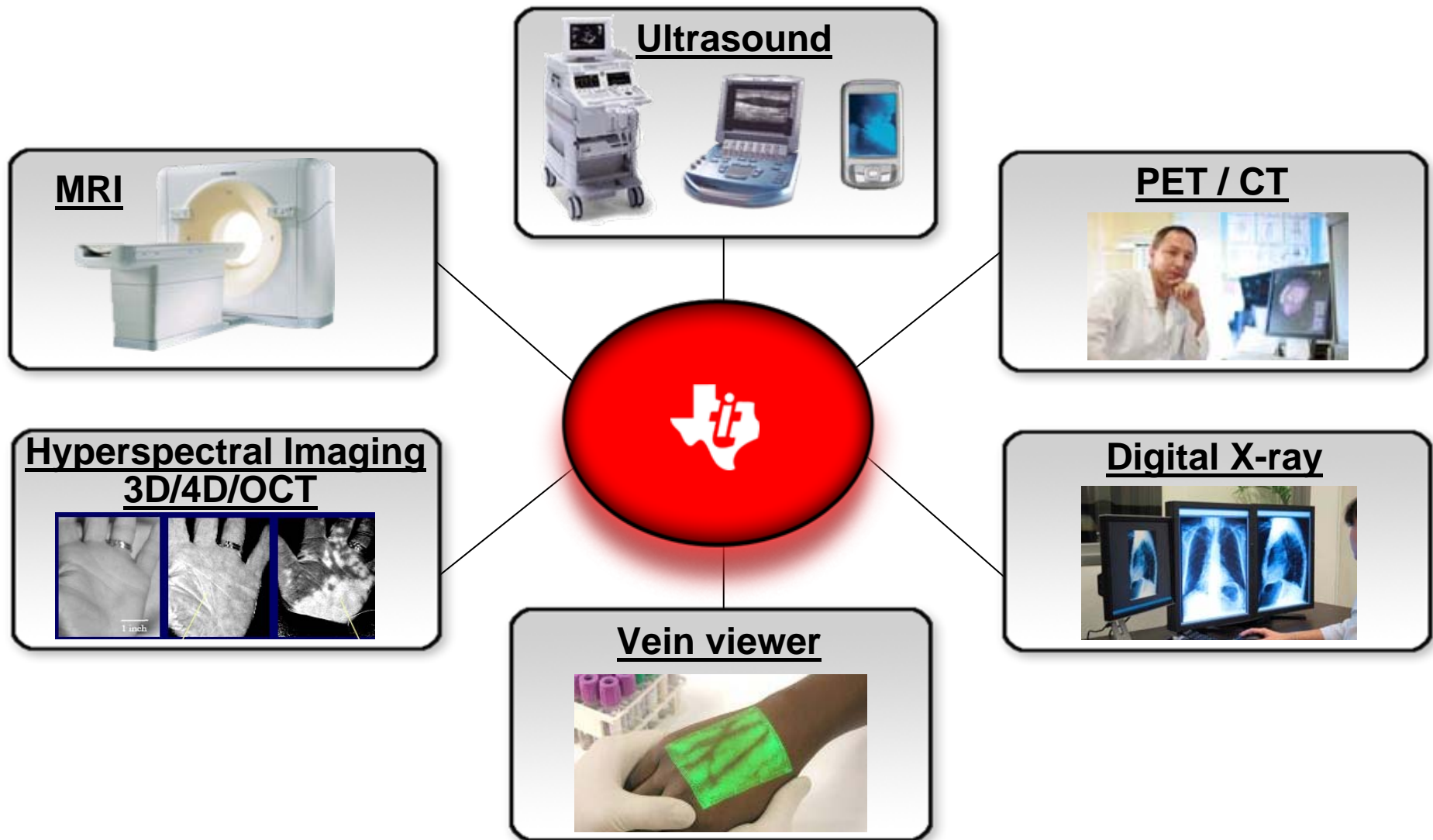
**Global Marketing Director, Medical Imaging DSP Group**

# TI is focused on medical



**Broadest portfolio of analog and embedded processing solutions in the market**

# Medical imaging modalities



# Embedded processors for medical imaging

## DaVinci™ -based System On Chips (SOCs)

Optimal imaging capabilities & system performance



## High performance fixed & floating point DSPs

Highest performance multi-core/singlecore with low power



## OMAP35x Applications processors

Enabling portability



## Digital signal controllers

Improving overall system functionality



# High performance, programmable platform



- Processor performance speeds image analysis – faster, clearer results
- New algorithms offer the latest image processing techniques – adaptive, patient-specific diagnostics
- Programmable DSPs enable software upgrades – lengthening the life of imaging equipment

# Enabling benefits



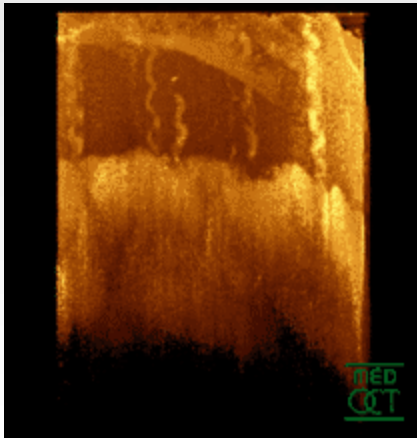
- High performance/low power processors enable portability – bringing imaging equipment to the point of care
- Integrating functions and reducing board size equals smaller equipment – OEMs can support fixed, cart, portable, and handheld product lines
- Reduced boot times/processing times delivers faster results – directly impacting trauma, triage, and remote care

# Enabling new applications

## 3D/4D Ultrasound



## Optical Coherence Tomography

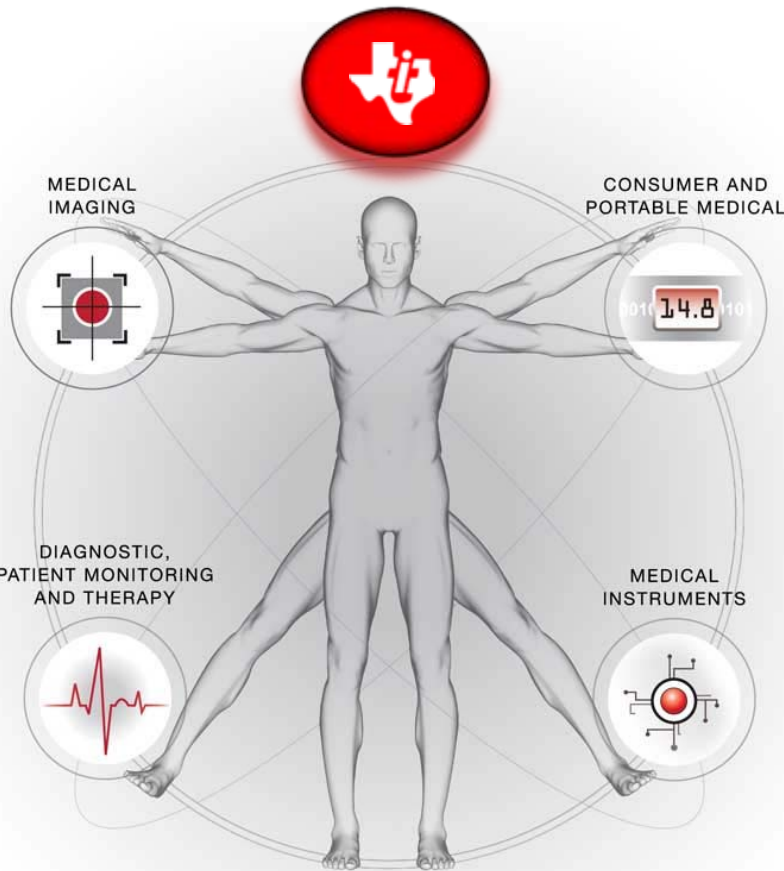
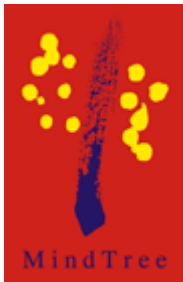


- DSPs meet real-time processing requirements for 3D/4D – delivering clinically significant results
- New applications such as optical coherence tomography benefit from computationally intensive DSP performance
- Inherent processor flexibility supports new algorithms for patient-specific tissue elasticity images
- Low power enables imaging to go to the patient – regardless of location



# Ecosystem speeds development

Third party network eases development, qualification and time to market concerns

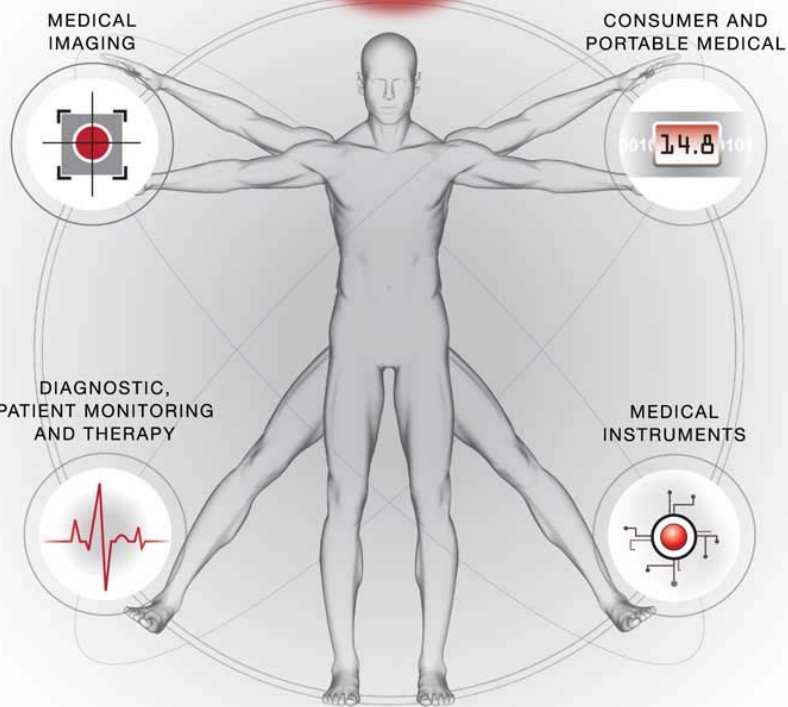




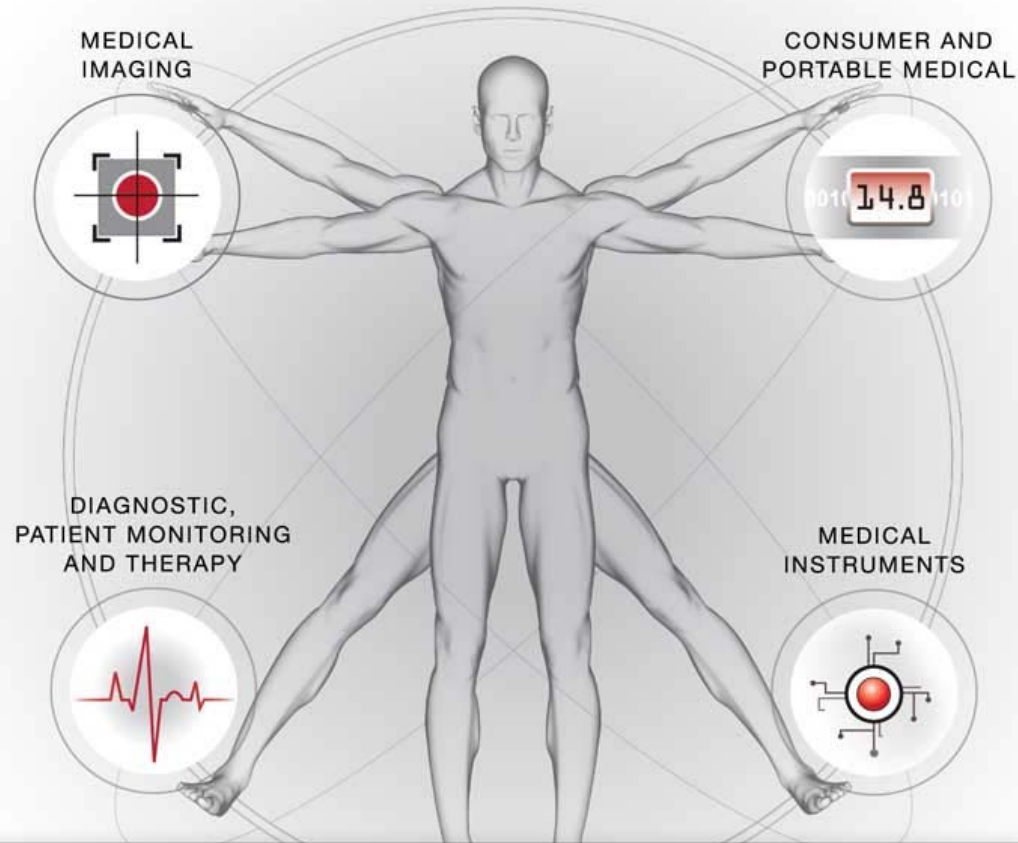
# Medical imaging ecosystem

University relationships and sponsored work drives development of new imaging algorithms on TI DSPs

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