

BBSensors

A portable and miniaturized wireless vital signs monitoring system for neonatology

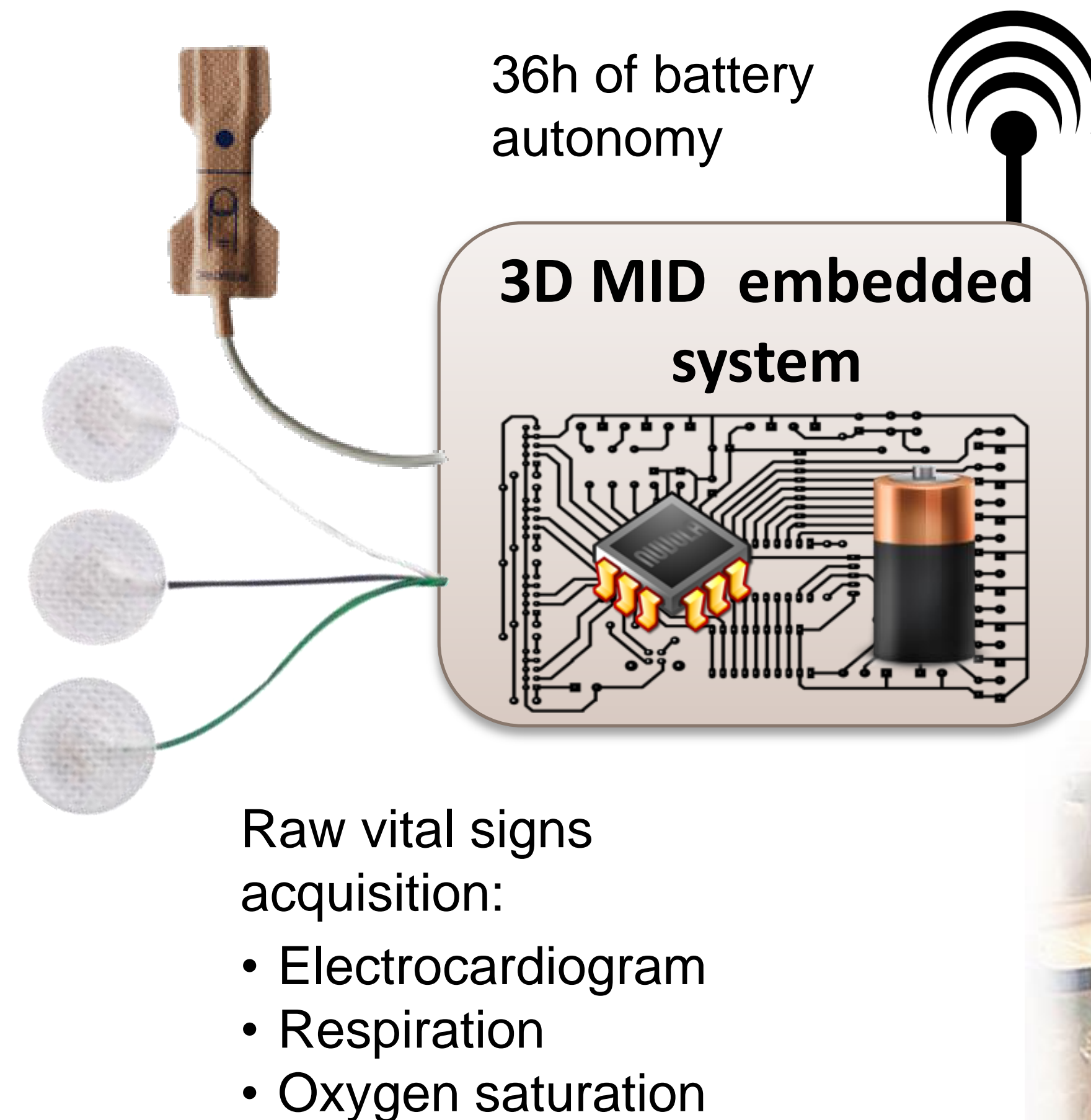
Project goals

- Improve premature neonatal medical care.
- Vital signs monitoring through wireless sensor technology.
- Monitor multiple patients remotely using mainstream mobile devices.
- Integrate seamlessly into existing hospital workflow.
- To reduce occurrences of vital signs artefacts by improving robustness of vital signs monitoring

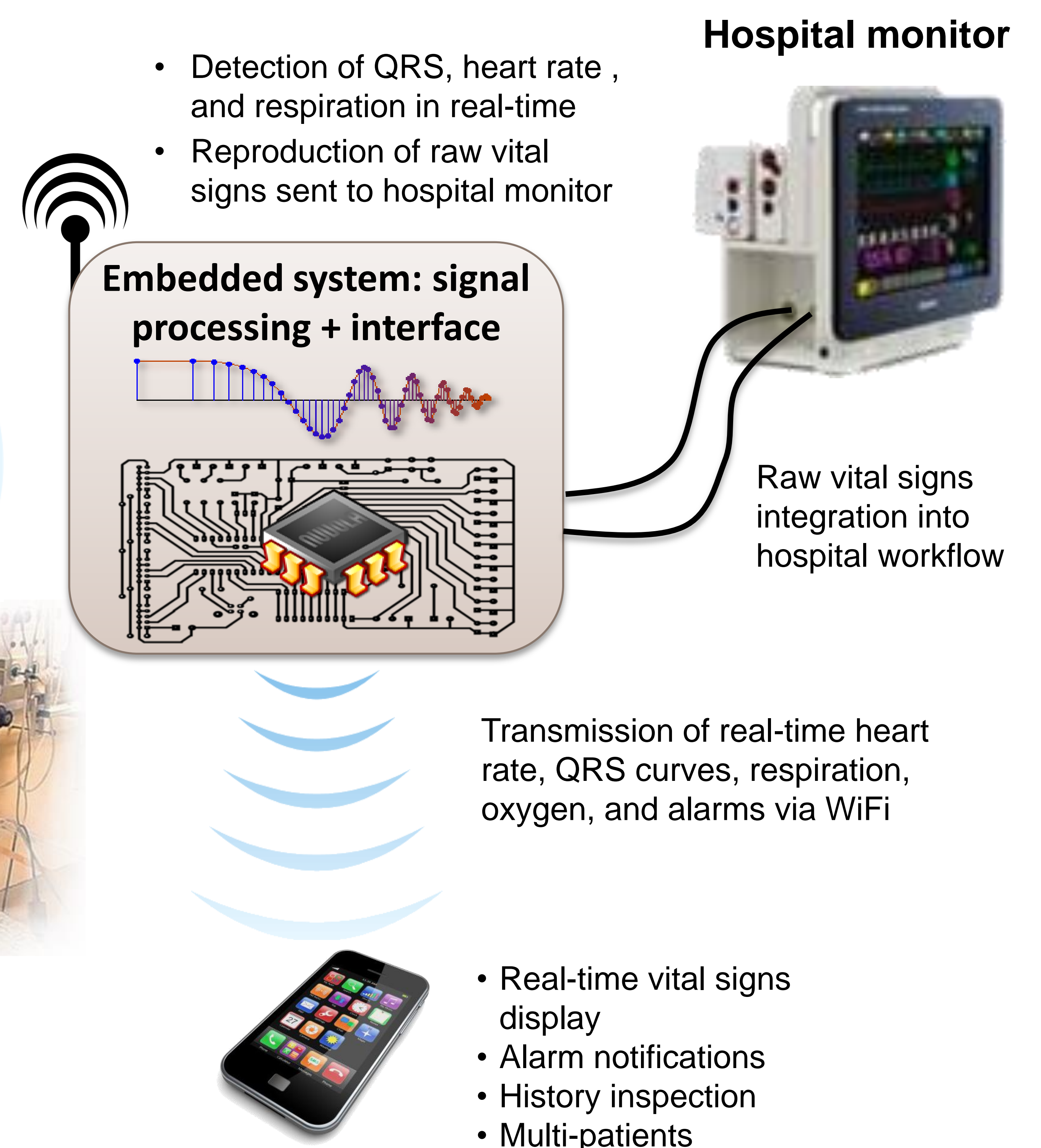
Innovation

- Novelty in the medical market: compact and wireless monitors targeted to premature newborns.
- Embedded system miniaturization through 3D Molded Interconnected Devices technology.
- Correlation of multiple signals for improved robustness.

ECG + SpO2 sensors



Raw vital signs
Transmission
via Bluetooth
Low Energy



Business Potential

- High mobility in health care.
- Can be made fully portable and autonomous for quicker emergency response aid.
- Same technology transferable to children and adult patients.
- Provide more autonomy to elder patients.

Expertise

- Hardware design and integration
- Software development
- Antenna design

Results

- Fulfil an unmet need.
- Fully functional system from end to end.
- Successful reverse engineering of sensors and hospital monitor internals.
- QRS complex detection algorithm leads to more robust results than hospital monitor.
- Full compliance with medical regulations in regard to wave emissions.

