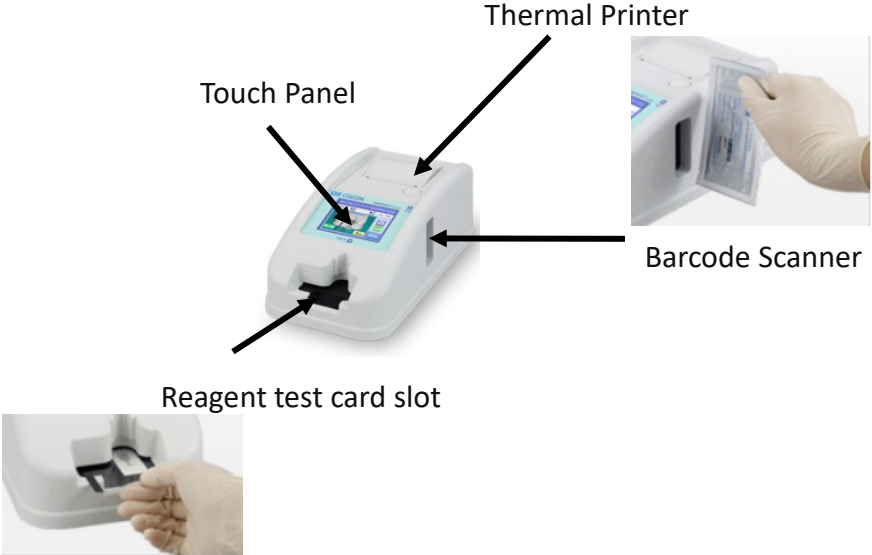


# Value Analysis Value Engineering: Hematology In-Vitro Diagnostic Device

Significant reduction in BOM cost of blood coagulation analyzer

## Holistic Value Engineering for reduced BOM cost, device size, and device weight

- Enclosure redesign for size reduction (40%) and material change (metal to plastic conversion) for weight reduction (35%)
- Reducing electrical BOM cost by – making single board design, replacing SD cards with flash memories, replacing FPGA with STM32 microcontroller, addressing obsolescence
- Replacing in-built thermal printer with high speed USB 2.0 interface for external thermal printers
- Rechargeable battery backup
- Firmware Development on latest version of  $\mu$ ITRON RTOS
- Integrated overlay instead of mechanical switches for better aesthetic with enhanced usability
- Compliance oriented design & DHF for Japan, Korea, China and other ASEAN countries



Team size	Model	Market	Business Benefit	Project Duration
7	Fixed Price	ASEAN	BOM cost reduction up to 25%	6 months