SeNDT Technology Data Sheet

SeNDT (Sensor Networking with Delay Tolerance) represents Trinity College Dublin’s implementation and deployment platform for our work on delay and disruption tolerance networking.

This technology provides a flexible platform for many environmental monitoring applications. It is currently being piloted for noise monitoring (see separate data sheet), lake water quality monitoring and fish-measuring applications.

Processor Board (Triton™-XXS)
- Intel XScale™ PXA255 (400 MHz)
- 64 MByte SDRAM (100Mhz)
- 32 Mbyte onboard Flash memory

Main Board
- 1 x PCMCIA Type II, typically populated with 802.11b Wireless Network Card
- 1 x Compact Flash, up to 4GByte Flash Disk storage
- 2 x Analog Devices AD7654 16bit Analogue to Digital Converters
- Real Time Clock with battery backup
- 1 x USB revision 1.1 Host controller
- 1 x USB revision 1.1 Device controller
- 2 x RS-232 ports
- ¼ VGA Monochrome LCD interface
- 16 function keypad interface

Expansion Board
- 3 additional RS-232 ports
- 4 x 1Amp external power sources (5V or Board power) latching relays
- SMBus V2.0 Interface
- Solar panel Smart Battery charging circuitry

Operating system
- Linux (2.6.15 kernel)

Power supply
- 6-13V DC
- 10.8V Li⁺ Smart Battery, with solar panel charging

Contacts

SeNDT is an Enterprise-Ireland funded project under their Commercialisation Fund. We are happy to discuss further research opportunities or licensing of the technology.

For further information email sendt@cs.tcd.ie or visit http://down.dsg.cs.tcd.ie/sendt/. Note that SeNDT is a pilot project; therefore the technology described here is not a product for sale.