小UMDICADA L'UMD VAST





System Overview

RACE RFID Advance Controller for Embedded

Introduction

© 2020 Unique Micro Design: Rev 04

Introduction

- The UMD *RFID Advance Controller for Embedded* (*RACE*) architecture is an industrial computing platform designed for collecting and visualisation of RFID and other data.
- The *RACE* architecture is based on an embedded controller that is used to interface to any UMD Protocol based UHF RFID Reader/Writers. It controls all aspect of systems operation including RFID data capture, sensors integration, diagnostics, database and network communications.
- *RACE* can be used either as a stand alone solution or integrated into web services including UMD's *RACE Cloud* services using standard REST/JSON APIs.
- A dashboard showing diagnostics and settings can be accessed via a browser or optionally attached HDMI external display / touchscreen.
- The *RACE* system is typically supplied as a prefabricated control panel for embedding into RFID reading systems to create RFID portals and tunnel readers.





RACE Cloud Solution

RACE Cloud is a combination of

- UMD Chariot service broker infrastructure which provides:
 - Single sign-on user authentication
 - API security
 - Device Asset Management (eg it has a name, a location, etc)
 - Device Logs of POSTed events
 - Device brokerage events POSTed to one or more services
 - Metadata for subscribing services used for application specific purposes
- Back end Storage Service
 - Database cluster
 - Redundancy
 - Data cached before sending onto reporting and other services
 - Implements data reduction logic configured by device metadata
- Customer/Project specific UI
 - Single sign on user authentication
 - Data visualisation
 - Reporting





UMD Model A250 Series RACE Portal

- The UMD Model A250 Series of RFID *RACE Portal* solutions are complete standalone RFID systems:
 - UMD RACE Controller
 - RFID Antennas and Cables
 - Sensors
 - Self contained industrial enclosure for easy installation



IIIII) RACE



UMD Model A250 Series RACE Portal









Custom RACE Portals









RACE Micro Architecture

- *RACE Micro* Architecture is based on an integrated controller, UHF RFID Reader/Writer and antenna designed for lower power/short read range applications, such as:
 - Conveyor belts
 - Smart shelves
 - Smart cabinets







Unique Micro Design Pty Ltd 1/200 Wellington Road, Clayton, VIC, 3168 +61 (0) 3 9582 7000 sales@umd.com.au www.umd.com.au

For more information on our RFID RACE Solutions:

http://www.umd.com.au/ftp/pub/RFID_RACE_Solutions_Info.pdf

