

**CYIENT**

**ENHANCING EMBEDDED  
SYSTEMS THROUGH  
TECHNOLOGY AND  
INNOVATION**

# Leveraging Cyient's multi-industry expertise in various embedded systems to solve customer's key pain points in engineering services, across varied disciplines of hardware, software, and product design & build.

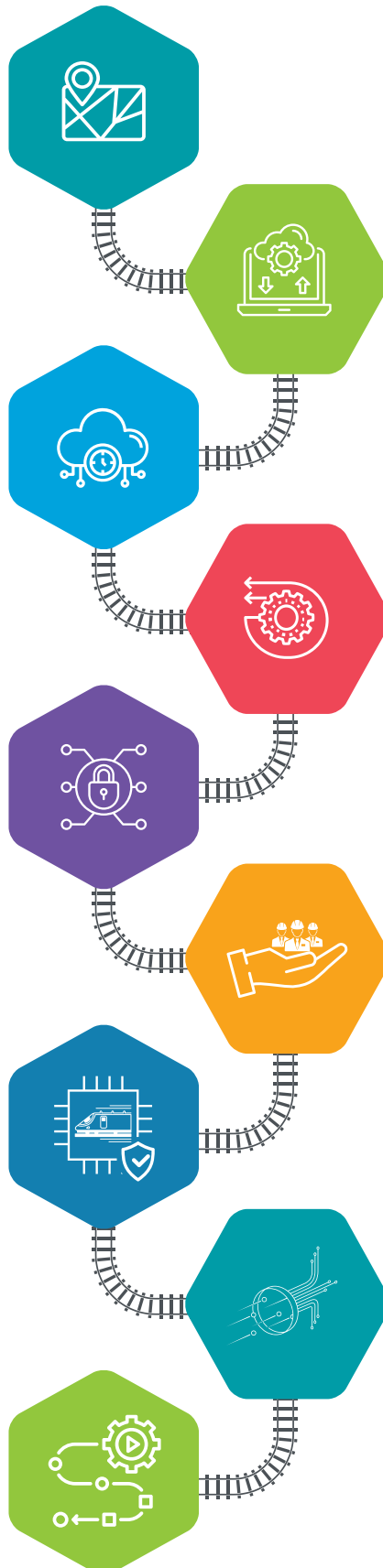
**Full Software Development in compliance with Industry compliance**  
Supported customers in full software development life cycle projects that includes Model based, Manual code and open source code.

**Export Controlled Programs**  
Our Melbourne team has supported various Export controlled embedded programs across different security levels through Nearsite or onsite teams

**Supporting customer at multiple locations across the globe**  
Supported customers working in multiple locations across the globe, for various embedded engineering activities through near-site, onsite and offshore models.

**System Safety engineering services with Industry compliance**  
Supported in product engineering across different phases of the life cycle that includes design to cost, across high safety levels to low safety levels

**Established processes and systems**  
In-house IPDP eight-phased process starting from ideation and conceptualization to manufacturing and product sustenance



## Migration programs for a seamless deployment

Supported customers in migrating the embedded systems (software and hardware) either due to obsolescence, development environment or compliance to regulatory standards

## Independent Verification & Validation

Supported customers in tool qualification, developing the IV&V strategy, V&V factory model to implement with a good track record of 100% successful certification.

## Managing program schedules of customer through right sizing of team

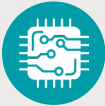
Supported in various types of projects involving flexible team size requirements across various competencies of different embedded domains in critical program phases

## Lab Infrastructure

15,000 sq. ft. across Digital, Power Electronics, RF and Comms. Lab with state-of-art test equipment for development tests

**Cyient's embedded capabilities spans across the entire life cycle, starting from design and development, independent V&V, and manufacturing. Cyient has over 1200 engineers working in the embedded domain, with an in-depth expertise in various software tools & technologies.**

### Software Development



Firmware Development  
– Microcontroller &  
FPGA



OS & Middleware  
Development – Device  
Driver & RTOS



Embedded Application  
Development – Manual codes &  
Model Based Development

### IV&V



Development  
Artefacts Reviews



Model based  
Testing



Software Unit and  
Integration Testing



Hardware-Software  
Integration



System  
Testing

### Hardware Development



Board Design



Power  
Electronics



Reliability, Testing  
and Qualification



ASIC and FPGA  
Design

<b>Design/Modeling Tools</b>	MATLAB / Simulink, SCADE, Artisan
<b>Development Environment</b>	C/C++, Ada83/95, Java, C#, DSP suite, Python, RTOS, Open GL, QT
<b>Testing Tools</b>	Lauterbach, CANalyzer, CANoe, RT Tester, RTRT, Cantata, VectorCAST, LDRA, Tessy, SLDV, CertSafe™, CertBench™
<b>Protocol</b>	ARINC 429, AFDX/CDN, MIL -1553B, CAN, RS 422
<b>Electronics Design Tools</b>	Mentor Tools, OrCAD, Cadence Tools, Altium, Pspice, RELEX
<b>FPGA Development and V&amp;V</b>	Xilinx, MicroSemi, Cypress, ModelSim, QuestaSim, Altera

**STANDARDS: DO 178, DO 254, EN 50128, EN 50155, IEC 61508, IEC 62304, ISO 13485, ISO 26262, ASPICE**



# Having worked on multiple embedded systems across industries, Cyient's capabilities spans across power systems, connectivity systems, controls, actuations & display systems, and RF & sensors.

Below are few key products and systems under these categories:

Power Systems	Connectivity	Controls, Actuations & Displays	RF/ Sensors
<ul style="list-style-type: none"><li>• Electrical power distribution</li><li>• Battery management system</li><li>• HVDC-DC converter</li><li>• Generation system</li><li>• Low power charger (incl. USB)</li></ul>	<ul style="list-style-type: none"><li>• Navigation &amp; surveillance systems</li><li>• Radio communications</li><li>• Edge connectivity</li><li>• SATCOM</li><li>• Wired &amp; wireless communications</li></ul>	<ul style="list-style-type: none"><li>• Control &amp; actuation systems (incl. door &amp; engine controls, medical diagnostics &amp; analyzers)</li><li>• Entertainment &amp; display systems</li><li>• Lighting systems</li></ul>	<ul style="list-style-type: none"><li>• IoT sensors</li><li>• Ride quality sensors</li><li>• Antenna systems</li><li>• Amplifiers and filters</li></ul>

## About Cyient

Cyient (Estd: 1991, NSE: CYIENT) is a leading consulting-led, industry-centric, global Technology Solutions company. We enable our customers to apply technology imaginatively across their value chain to solve problems that matter. We are committed to designing tomorrow together with our stakeholders and being a culturally inclusive, socially responsible, and environmentally sustainable organization.

We partner with customers to operate as part of their extended team in ways that best suit their organization's culture and requirements. Our industry focus includes aerospace and defense, healthcare, telecommunications, rail transportation, semiconductor, geospatial, industrial, and energy. We are committed to designing tomorrow together with our stakeholders and being a culturally inclusive, socially responsible, and environmentally sustainable organization.

For more information, please visit [www.cyient.com](http://www.cyient.com)

## Contact Us

### Belgium

Cyient  
AnSem NV  
Esperantolaan 9  
3001 Heverlee, Leuven  
T: +32 16 38 65 00  
[Semicon@cyient.com](mailto:Semicon@cyient.com)  
[www.cyient.com/anssem](http://www.cyient.com/anssem)

### North America Headquarters

Cyient, Inc.  
99 East River Drive  
5th Floor  
East Hartford, CT 06108  
USA  
T: +1 860 528 5430  
F: +1 860 528 5873

### Europe, Middle East, and Africa Headquarters

Cyient Europe Limited  
Apex, Forbury Road,  
Reading  
RG1 1AX  
UK  
T: +44 118 3043720

### Asia Pacific Headquarters

Cyient Limited  
Level 1, 350 Collins Street  
Melbourne, Victoria, 3000  
Australia  
T: +61 3 8605 4815  
F: +61 3 8601 1180

### Global Headquarters

Cyient Limited  
Plot No. 11, Software Units Layout  
Infocity, Madhapur  
Hyderabad - 500081  
India  
T: +91 40 6764 1000  
F: +91 40 2311 0352

Follow us on:

