

DIXON SELVARAJ

Phone: +81 080-6990-0486 • Email: dixonj143@gmail.com • Location: Nirasaki, Japan • Citizenship: Indian (Eligible for relocation or remote roles)

PROFESSIONAL SUMMARY

Results-oriented Electrical Design Engineer with over 8 years of hands-on experience in semiconductor, automation, and industrial equipment design. Specialized in ETO (Engineer-To-Order) and sustaining engineering processes with expertise in electrical schematics, panel layout, cable harnessing, BOM creation, and product documentation. Strong background in international compliance standards including SEMI, UL, CE, and NEMA. Adept in cross-functional collaboration, troubleshooting, and lifecycle support for capital equipment systems.

TECHNICAL SKILLS

- Electrical Design Tools: AutoCAD, E-Plan P8, ECAD, SolidWorks PDM
 - Standards: SEMI S22, UL508A, IEC 60204-1, NEMA
 - Systems: PLC/VFD/MCC Panels, Sub Switchboards, Heater Chambers
 - Documentation: BOMs, Schematic Diagrams, Wiring Procedures, ECO/ECN
 - Platforms: SAP, EPDM, VPS Viewer, JIRA
 - Simulation & Testing: Basic OrCAD, PSpice familiarity, EMI/ESD protocols
 - Communication Buses : EtherCAT
-

PROFESSIONAL EXPERIENCE

Lead Electrical Design Engineer

HCL Technologies - Tokyo Electron Project / Japan / May 2023 - Present

- Designed semiconductor equipment modules (EFEM, TM, PAS chamber, utility racks) for 300mm wafer CVD systems.
- Created panel layouts, cable harnessing, interconnect diagrams, and power distribution systems.
- Selected power and control components including stepper motors, driver units,

and interface boards.

- Authored and implemented wiring instructions and design test plans.
- Managed BOMs and change control using ECN/ECO process through SAP.
- Collaborated across mechanical, software, and process teams for NPI and field issue resolution.

Senior Electrical Design Engineer

L&T Technology Services / India / Apr 2022 - May 2023

- Designed and customized LVMCC Allen Bradley control panels based on customer CTO/CMOD.
- Performed load analysis, busbar sizing, GA layout, elevation views, and component integration.
- Delivered engineering packages compliant with UL, NEMA, and IEC standards.
- Interfaced with Rockwell and client teams for technical alignment and production troubleshooting.

Electrical Design Engineer

ECI Systems Pvt. Ltd. / India / Jul 2019 - Mar 2022

- Created detailed control and power wiring schematics for MV/LV systems.
- Designed SLDs, mimic layouts, and logic diagrams including interlocks and safety relays.
- Executed field supervision for system commissioning and factory acceptance testing (FAT).

Electrical Design Engineer

Ragavendra Controls Pvt. Ltd. / India / Dec 2016 - Jun 2019

- Developed full-scale OEM panels, including MCCs, starters, and field interface panels.
 - Ensured compliance with IEC/NEMA for indoor/outdoor and hazardous area-rated panels.
 - Managed design documentation, procurement coordination, and site electrification.
-

EDUCATION

Bachelor of Engineering (B.E.), Electrical and Electronics Engineering
Karpagam University - India | 2014

Diploma in Electrical and Electronics Engineering
Karpagam Polytechnic - India | 2011

PROJECTS & KEY CLIENTS

- Tokyo Electron Ltd. (Semiconductor)
 - Plasma-Therm LLC (Semiconductor)
 - Rockwell automation (Industrial Automation)
-

CERTIFICATIONS & TRAINING

- SEMI S22 & UL508A Application and Compliance
 - Electrical Safety and Interlock Design (TUV concepts)
 - AutoCAD & E-plan Electrical design essential
-

LANGUAGES

- English - Fluent
-