



# Capability Statement

JPS Engineering Corp

## Design, R&D Solutions, and Program Management in Electrical Engineering, Firmware, Mechanics, Software Systems

### Company Profile

JPS Engineering Corp. (JPS) is a Certified SBA 8(a) BD Company in business for five years with offices in San Diego, CA.

Our mission is to provide exceptional engineering services.

Our customers are in the Government, Defense, Power, Medical and Consumer Products industries.

We help our customers deliver engineering design solutions to meet their program requirements.

We have a unique capability to innovate with a history of multiple awarded patents.

Our engineering and business team has a track record of high quality solutions and designs for technology and product companies.

### JPS Personnel is Experienced

- Engineering Services
- Research and Development
- Custom Computer Programming
- Computer Design
- Instrumentation and Sensors
- Control Systems
- Power Electronics
- Optical communications
- Electromagnetic Design, EMP, EMC, ESD
- Manufacturing Engineering
- Mechanical Systems
- Computer Simulation
- Quality Assurance, Reliability and Safety
- Metrology & Materials Science
- Program Management & Technical Leading

### Intellectual Property

- Cybersecurity Solutions
- Semiconductor Laser Controls
- Instrumentation

### Benefits of Working with JPS

We deliver customer's projects on time, on schedule, on budget, with reduced risks. with high quality results and with results that meet stringent specifications.

Our technical breadth in R&D, Manufacturing and Quality/Reliability enables us to be a one-stop shop that combines engineering design, testing and documentation for our customers.

Our customers benefit from our capability to solve systems problems. We resolve complex issues through an approach that combines the integration of software, electronics, signal processing, mechanics and embedded firmware.

### Company Background

JPS Engineering was founded on the principle to deliver optimal technical solutions to industry. We use best practices learned from the Defense and Commercial industry to enhance reliability, performance and cost-effectiveness. The company has brought in significant engineering talent in broad areas of engineering, and experienced on innovation in several industries, with over 100 years of combined experience. The core of the JPS team has a long history of working together. This provides continuity of relationships and promotes teamwork and synergy for getting work done.

### Company Designations and Certifications

NAICS CODES: **541330, 541712, 541511, 541512, 541519**

PSC CODES: 8711, 7371, AJ43, AJ46, R413, R408

DUNS: 832668276, CAGE:5SZK5

California Corporation: 3466090

Certified SBA 8(a) BD Company, Hispanic Minority Owned Small Business, SDB, current in SAM.

Licensed Professional Engineers

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## JPS Engineering Corp

### Selected Projects

Project Name	Purchaser of Product/Service	Description
PEACE CARVIN V Aircraft Maintenance and Operations Support. Mountain Home Air Force Base. Prime Contract FA4897-12-C-2004	PKL Services, Inc.	Configuration management of Aircraft, Database system for aircraft maintenance management, schedule of flights and maintenance schedules, documentation of aircraft maintenance and repairs, engine management.
Anti-tampering lock	OpticalLock Inc.	Technology solution to prevent counterfeit parts from getting into supply chain.
Engineering Data Management	M7 Aerospace	Update and maintenance of databases.
Battery power supply and charger electronics	Lithium Boost Technologies	Electronics and control system for a power supply and a charger used in electric vehicles to meet performance and safety requirements.
Software architecture & design. Business consulting and patent portfolio development.	Smart Screen Networks	Architecture of cloud computing software system with multiple software modules & databases to execute video and audio signal processing for consumer applications.
<b>Examples of prior work executed by JPS team and as individuals</b>		
New Product Introductions	Hewlett Packard	Manufacturing of Mechanical systems for printers, tooling of plastic and metal parts
Embedded Control Systems	US Government (National Institute of Standards and Technology)	Awarded project to design and support atomic clock control system and performance simulator using Digital Signal Processing to manage miniature atomic clock containing laser, sensors and cesium cell.
Optical Communications	Intel	Sold laser transceiver control unit technology.
Power Electronics	WooYoung (Korea)	Awarded contract to develop high voltage inverter.
Optical Communications Transceiver	TYCO Electronics	Designed and sold laser control system for fiber optic communications
Power Electronics for Displays	Samsung	Received a \$1 Million development agreement to develop power electronics circuits for LCD displays used in televisions.
Instrumentation	Dimension Instruments	Developed oscilloscope optical front end for electrically isolated measurements
Instrumentation Integrated Circuit (IC) Design	Ceyx Technologies	Developed IC for precision measurement of high voltages and currents in presence of noise and to switch High Voltages.
R&D, Product Qualifications & Manufacturing	Hewlett Packard	Power design, Electromagnetic Compatibility design, precision analog instrumentation, digital hardware & Software design, reliability and product qualifications.

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### Key Personnel Bios

Jorge Sanchez	CEO and Founder. Registered Professional Engineer, California License E20704; Co-Founder & Chief Technology Officer at CEYX Technologies, R&D Project Manager, Manufacturing Manager, Technical Leader, Design Engineer and Software Engineer at Hewlett Packard; R&D Systems Design Engineer at National Semiconductor and NCR Corporation. Independent inventor with 35 Years of Design and Technical Management Experience. Led engineering teams to develop optical transceivers, LCD TV products, which resulted in over 65 patents issued and pending. Secured customers from Fortune 100 companies and profited from the sale of a technology portfolio to enable investor exit. Most recently awarded patent in Systems Software Architecture. Mr. Sanchez has an MSEE and a BSEE from San Diego State University and is a graduate of the Executive Program for Scientists and Engineers at UC San Diego.
Carol Fuller	Business Development Manager. Business Management Consultant, Business owner, Co-Founder & CEO of CEYX Technologies, Business and Technical Manager at Hewlett Packard and Quantum Corporation. 31 years experience in management of technology business. Expertise in IP management and licensing, manufacturing, supply chain, process and quality improvements, domestic and international business contracts, business development and strategic planning. Ms. Fuller has developed and managed company business plans, financial models, pricing schemes, staffing plans, operating budgets, market feasibility studies, COGS models, technology readiness processes, BOD progress reports and, employee performance standards. BS Chemistry, CSU Sacramento; MBA, International Business, University of San Diego.
Alicia Dutcher	Senior R&D Engineer. Expert in real-time embedded controls, software applications, server software and mobile phone apps; Senior Engineer at CEYX Technologies; PC applications developer. Expertise in Firmware, Software and Systems. 10 years experience, BS Computer Science with honors from CSU San Marcos.
Keith Johnson	Power supply and power systems engineer. BSEE, 20 years experience in power systems with Hewlett Packard.
Ralph Malaker	MSEE, BS Physics, RF Communications systems engineer. 10 years experience in Communications Engineering for L3 Communications
Barry Dorr	Consultant, Control Systems, RF Communications and Digital Signal Processing. MSEE, 24 years of experience.
William Gallego	23+ years of experience in product qualification, reliability, maintainability, quality and safety for Hewlett Packard, Imed, IVAC, Care Fusion, Hamilton Sundstrand, to include products for critical life support systems and avionics. American Society of Quality Certifications as a Reliability and Quality Engineer.
Kevin Fry	BS Computer Science; Software Development and Embedded Systems. 10 years of experience

NAICS Code	Service Area Description
541330	Engineering Services: project management; documentation; electronic and electro-optical design and system simulation; reliability and quality; design qualification and testing; failure analysis; systems repair and maintenance; patent application drafting.
541511	Custom Computer Programming Services: graphical user interfaces; website development; client-server applications; software quality testing; test equipment software, database development; software system architecture and software development; software re-design / modification.
541512	Computer Systems Design Services: embedded controllers; embedded firmware; pipeline processors; multiprocessor systems; computer performance modeling; logic design; systems integration services.
541519	Other Computer Related Services: software installation services
541712	Research and Development in the Physical, Engineering, and Life Sciences: power supply design; power electronics; instrumentation design; sensor design; optical electronics/lasers; EMP /ESD / EMC design, test, modeling, qualification; analog circuit design; reverse engineering; new technology innovation

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