

HAVENTECHNIK

Offering Summary:

PCB Design

- Conceptualization
- Layout
- Manufacture*

Areas of Know How

- Standard Industry Discipline & Tech
- IOT (ETH, WIFI)
- Instrumentation
- Environmental Control & Monitoring

Customized Software

- PC Based
- WEB / Cloud
- Embedded Code (PIC Microcontroller. Arduino)

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HavenTechnik - embedded design, consulting and systems manufacturing. We develop solutions which integrate the best sensor or sensors in configuration to capture the data, process to ensure accuracy and then display either an on-device display e.g. LCD. *Alternatively*, wireless or wired connectivity to systems (IOT: Intranet | Internet) which perform

Alternatively, wireless or wired connectivity to systems (IOT: Intranet | Internet) which perform the same and archives the data. Our endeavor is to ensure that our valued client realizes the best ROI on the supplied solution. Our areas of focus below:

Environmental Monitoring & Instrumentation

- Temperature
- RH% (Relative Humidity)
- pH (potential of Hydrogen)
- GAS (Methane, Butane, LPG, Carbon Monoxide, Alcohol, Hydrogen, Air Quality)

Data Collation & Communications - IOT

- WIFI
- MIWI, OOK
- LORA
- Ethernet (wired)
- Bluetooth
- GSM

Hardware Design

For a full solution, i.e. hardware & software: we create the PCB layout from either an existing or client provided circuit layout using EAGLE CAD. Once the inhouse design is complete, manufacture is entrusted to ISO 9000 accredited suppliers. Depending on the PCB, assembly will be either outsourced or completed inhouse.

Software, Apps and Web

We develop *Embedded Software* in C, and PC Based software in C#, ASP.NET, .NET Framework

Attributes of Software Development

- The embedded software is written in C using MPLAB or MikroC compiler
- PC or Device based software is written using the .NET based environment. This guarantees the longevity of the solution and therefore the maintainability of the code normally for user interface or service-based interaction
 - Agile methodology is used which enables a phased approach to delivery
 - Systems can be developed and delivered complete or through progressive updates

Microcontroller Families & Systems

We utilize the best suited microcontroller and technology for the application on hand. However, in many instances, the ever-expanding product portfolio of <u>Microchip</u> has offered the technology or device best suited to a project's objectives.



The systems designed by HavenTechnik are custom designs, developed specifically to client specification. We have a comprehensive induction process which involves pointed questionnaires that get to the core requirements quickly and succinctly. Time is money and to avoid wastage in developing either a standalone or networked system, we strive to resolve the requirements gathering phase as quickly as possible.

We utilize the latest technology from Microchip (PIC, ATMEL, CEC etc.)



Return on investment is crucial, we guarantee that the system is developed in a costeffective way. This ensures the lowest cost possible in manufacturing and extends to maintenance for the system life cycle, to keep operating costs down.

We implement I4 principles in our designs such that there is concurrency between current needs along with ensuring that the system remains compatible and extensible for future requirements.



Ideally, the system when the latest protocols and information architectures are used, should only require a reprogram to update / upgrade to the next step in system evolution.

The invaluable data gleaned from higher level systems is stored in retrievable and consumable ways to generate meaningful insights.

HavenTechnik Product Line: We do offer standing product lines in the following areas:



- PIC Development Systems
- Pressure Monitoring System
- Environmental Monitoring
- Data reporting systems

How to get started?



- Contact us, and we will initiate a meet
- Comprehensive design requirements session will commence
- Quotation to suit budget will be provided
- Flexible solutions available on end to end system support, maintenance and IP ownership



Hourly rates: Please enquire for the rate relevant to your region.