

A Brief Overview of Our Business, Durand Interstellar, Inc.

In 1980, Jerry discovered a booth in a local shopping mall where they took your picture and printed it on a calendar or T-shirt while you waited. He started talking to the owner of the booth who happened to have the same name as a famous cartoon character and found out that their machine was a custom computer that captured a video image, processed it, and sent it to a printer with special heat transfer ink. It also turned out they were having some trouble with it so Jerry offered to help them fix it. Once it was working well, Jerry left them his contact information in case they had any other problems. A short time later they contacted him and said a friend was having trouble with his carnival attraction, would it be possible to check it out for pay. Jerry went to the carnival and was shown the malfunctioning attraction. It turned out to be a simple repair, that was done and paid for. Afterwards, Jerry wandered around the carnival for a bit and went home.

Not long after that Jerry and Sharon were married and then there was another carnival attraction in need. This time Sharon and Jerry went together to see what the problem was. The attraction turned out to be a “handwriting analysis computer” which was really just a small live-in trailer with a side that opened up. It was decorated with old computer parts, blinking lights, and had three “analysis” stations. The main problem turned out to be the unstable power supplied by the carnival generator. Jerry & Sharon replaced the power supplies with better quality ones that now worked reliably. The owner was very happy but mentioned that the machines themselves, which drew the results of your analysis onto a card, were very troublesome. These machines were modified old military graph drawing machines that had been used in medical testing. We agreed to look into what could be done and proposed building new machines with highly reliable motors and modern (for the time) digital controls.

At this point, Jerry & Sharon decided that forming a business would be good as we could buy parts wholesale and also better account for the income generated by repairing things for other people. Originally the company name was simply “Gerald Durand” but was later changed to “Durand Interstellar Research Group” as that sounded a lot more interesting. It was, in fact TOO interesting to the federal tax people. Having the word “Research” in your name triggers all sorts of alarms at the tax bureau so we changed it yet again to simply “Durand Interstellar”. We declared our purpose to be “any legal business activity” so that didn’t limit us to any one thing.

We chose the name “Durand Interstellar” because “Durand International” was already taken and also we were very interested in the space program. It turned out that this was a very good choice as many, many years later Universe smiled on us and we sold our domain name, “Interstellar.com”, for enough money to enable our move to Russia.

So later, a handwriting analysis carnival wagon appeared in our driveway and we started the reconstruction. Jerry designed the mechanical hardware to be simple and rugged, then hired a machine shop to build the mechanical parts. The machine shop complimented him on having accurate, complete drawings. They were especially surprised to see that everything fit together perfectly after they'd made the parts. Apparently, this rarely happened.

While working on the carnival wagon retrofit, Jerry joined an amateur rocket building group that was part of the L5 Society. The L5 Society promoted space travel and the colonization of space for civilian commerce and habitation. Some people labeled it as a bunch of crazy people wasting money, but the Society actually helped to advance the space program.

So, now in the driveway was both a carnival wagon AND a large, long aluminum rocket that Jerry was welding fins onto. Somewhere around this time, our neighbors decided we weren't a normal couple.

The carnival wagon retrofit was a success, it was very reliable and even had blinking lights and sound generation of computer beeps and boops. Also the analysis it made was much more random than the previous units so it was more entertaining. No two people got exactly the same results. To prevent people from submitting the same handwriting sample again and seeing the different results, the sample was crumpled before being returned to the customer.

The rocket also flew well, broke the sound barrier going up to around 5 miles. We had taped one of our business cards to the side of the rocket, so this was our first business venture into space. Unfortunately, the person who did the recovery system made a mistake causing the parachute to not deploy correctly and the rocket suffered a crash landing.

And so we came to the end of our first calendar year since we'd been married and had to explain all of this to the tax authorities.

Over the years there were some repairs and minor upgrades to that carnival attraction until eventually the owner retired and sold it. We never heard from the new owner so we have no idea how long it lasted beyond that. However, it outlasted the owner's expectations as it was used in the US desert states as well as in the rain and shine throughout California. We also did some repairs to other carnival equipment from time to time based on our customer's recommendations.

In 1989, our accountant advised us to incorporate for better tax rates. So, we incorporated as "Durand Interstellar, Inc." and have used that name ever since. In 1990, we received a telephone call from the federal tax authority, it seems there had been an error made in our incorporation and our taxes had to be refiled after the error

was corrected and, of course, a fine paid. We fired our accountant and business lawyer and hired a new accountant who proved to be very good. We haven't had any tax issues since.

Since founding our business, we have preformed design and other consulting services for businesses large and small around the world. We have shipped products and designs to many countries all over the planet. We're not Interstellar...yet but Jerry did work on the Space Shuttle back in Florida where he was also able to place a hand print on the side of the Apollo Command Service Module used for the Apollo-Soyuz mission. Also, Jerry's roommate in Florida had acquired most of one of the practice space suits, so they were the only people around with part of a real Apollo suit in their apartment. Before leaving Florida Jerry did get to try on a real practice moon suit at the Kennedy Space Center. At the time, this all seemed perfectly normal.

Over the years we have done custom work, including circuit designs, schematics, PCB (printed circuit board) layouts, mechanical designs, fabrication, 3D printing, machining, assembly and programming for many companies in addition to our own products.

The following are some of the companies we have worked for: 21st Century 3D (video camera for Sony), ACD (pedestrian walkway lighting), aHandSoft (consumer electronics), Alameda Scientific (consumer audio), Ambutrace (medical equipment), ASG Technologies, Inc. (video game hardware), Arizona State University (SD Card debug), BadgeCam (police camera), BAPS (intelligent lighting controller), Bechtel Inc. (control and data acquisition systems for a US Department of Energy clean coal project), Bill Russell (handwriting analysis computer), BotTrekkie (optical device), Cameron Shaw (lighting program), CargoHat (mechanical design), Chris Babbie (audio junction box), Cirque du Soliel (high power lighting dimmers), Cobb (lighting control), Coherent (commercial and research laser controllers), Credence Technologies (semi-conductor fabrication instrumentation), DataStick (hand held data collection), Davidson (neon sign animator), Diesel Quality Services (fuel sensor and fuel conditioner), DSPeech Inc. (voice changing circuit), Echelon (lighting controller), eFuel (high voltage processing equipment and fuel conditioner), Epson of Palo Alto (industrial test equipment), Explus (lighting program), Fat Spaniel (solar controllers), Florida Power and Light (photovoltaic controller), GradeEasy (survey equipment), Imagecraft (industrial control), Industrial Laser Service & Supply (laser engraver control), Jaggi (sonogram controller), JDSU (reliability analysis), Jeff Pierce (talking altimeter, broadcast antenna monitor), John Leonard (museum display controller), Kevin Willoh (electronics consulting), KidCase (patented iPad locking device), KSI Corporation (anti-terrorist monitoring device), LED Worklights (lighting controller), Litterst (battery charger), Lucidity Institute (sleep monitoring device and wireless seminar polling device), Mediagate Inc. (automated attendant and industrial modems), Moody (glass polishing device), NuField (poultry environmental control), NXP (programming), Overcomer Man (alternate energy collector), Pneumark Automation (industrial controls), Point Red (wireless modem), Pumpkin-Salvo4 (programming), Purdy (magician's wireless device), Quigley (battery charger), Redwood Technologies (central office VoIP), Rhetorex (automated attendant/voice mail), Rhode Island College (theatrical motor and lighting controls), Rokit (iPad monitor), Sean Benson (advertising sign controller), Sega of America Inc. (video game controller and VR Project), SerVision (military video device), Sleeptrace (medical device), Softier (surveillance equipment), Stanford Research Institute (Homeland Security sensor), TJ

McHose (lighting controls), Tryon (alternate energy controller), U.C. Berkeley (audio device), Vertical Networks (telephone equipment), Vynet, Inc. (digital voice recorder), WattWize (lighting controls), Whitfield, Inc. (telephone central office equipment), and Zagros Robotics (motor control).

Sharon, as a Design Engineer and member, as well as Jerry, of IEEE (Institute of Electrical and Electronic Engineers), also did Printed Circuit Board Layout designs for the following companies among others: Areca Science Inc., Atron Inc., Audio Access, Brent Systems Inc., CopperCom, Exel Microelectronics, Inc., Harmonic Lightwaves Inc., Imedia Corp., Intrasytems Inc., KLA Instruments Corporation, Kubik Enterprises Inc., Metrologix, Patchen Inc., Positive Light, Raychem Inc., Rigg Engineering Group Inc., Source 1 x-ray, Spectra Physics, Trimble Navigation, Ultratech Equipment Inc., and VL Laboratories.

Sharon also worked as a writer of several video game story lines for ASG Technologies, Inc.

We have also designed and produced many of our own products. Some of these are: 4201A through C (several versions of theatrical lighting control used for movie, TV, and stage), ACA (ARM Cable Adapter), CAN Reader (electric vehicle testing), Chain Motor Controller and Switch (coordinates movement of multiple theatrical lifting motors), Chickie's Rustic Farmhouse Brooder (electric hen for keeping young poultry warm), DC Dimmer (4 and 8 channel versions for theatrical lighting), DILI (DALI to RS-232 and DALI to DMX-512 converters), Fire-Fly MSL (device for healing through the application of light), HHIS (hand held ignition system for fireworks), Kiln-Controller (controller for maintaining temperature for a ceramic kiln), Mag-Spin 8 (device for magnetic treatment of water and other objects), MIDI to RS-232 (theatrical protocol translator), Photon Vortex Pulser (high voltage lighting control), Rotator (theatrical mirror ball rotator), Switch-MIDI/RS-232 (theatrical protocol converter), and X-42 (telekinesis testing/training device).

Out of the work on the 4201 products, Jerry was invited to work on a revision to the DMX-512 specification which is the primary worldwide protocol for controlling theatrical lighting.

While working on the design for KidCase’s product, Jerry was named as co-inventor on the patent.



(12)

United States Patent

Einzig et al.

(54)

METHOD AND SYSTEM FOR USING A SUPERVISORY DEVICE WITH A MOBILE DEVICE

(71)

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(72)

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(73)

Assignee: Kid Case, Inc., Parsippany, NJ (US)

(*)

Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 82 days.

(21)

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(51)

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H04W 8/22 (2009.01)

H04M 1/725 (2006.01)

(52)

U.S. Cl.

CPC H04W 8/22 (2013.01); H04M 1/7253 (2013.01); H04M 1/72527 (2013.01); H04M 1/72577 (2013.01)

(58)

Field of Classification Search

None

See application file for complete search history.

(10)

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(45)

Date of Patent:

Jul. 4, 2017

(56)

References Cited

U.S. PATENT DOCUMENTS

4,032,983 A

6/1977

Sato

5,938,767 A *

8/1999

Horn

H04L 63/10

710/108

(Continued)

FOREIGN PATENT DOCUMENTS

FR

2976497

6/2011

IL

140624

10/2003

OTHER PUBLICATIONS

Bigben Interactive, Parental Control: Protective casing integrating parental controls for the Nintendo 3DS console, <http://www.bigben-interactive.co.uk/produit/id/4516>, printed Aug. 1, 2014, 5 pages.

Primary Examiner — Moustapha Diaby

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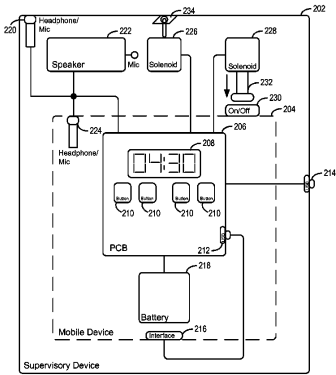
Attorney, Agent, or Firm — McDonnell Boehnen Hulbert & Berghoff LLP

(57)

ABSTRACT

A method and system are provided for monitoring and controlling a mobile device using a supervisory device. In some embodiments, the supervisory device operates in conjunction with the mobile device to monitor an extent of usage of the mobile device as well as to ensure that certain software is being used appropriately. The supervisory device may take one or more responsive actions when an extent of usage of the mobile device reaches a threshold extent of usage, when certain software on the mobile device is not being used appropriately, and/or when certain settings of the mobile device have been changed. The supervisory device may operate in a non-permissible mode and determine that the mobile device is currently enabled. In response to this operation and determination, the supervisory device may disable the mobile device and/or transmit to an external device a notification message.

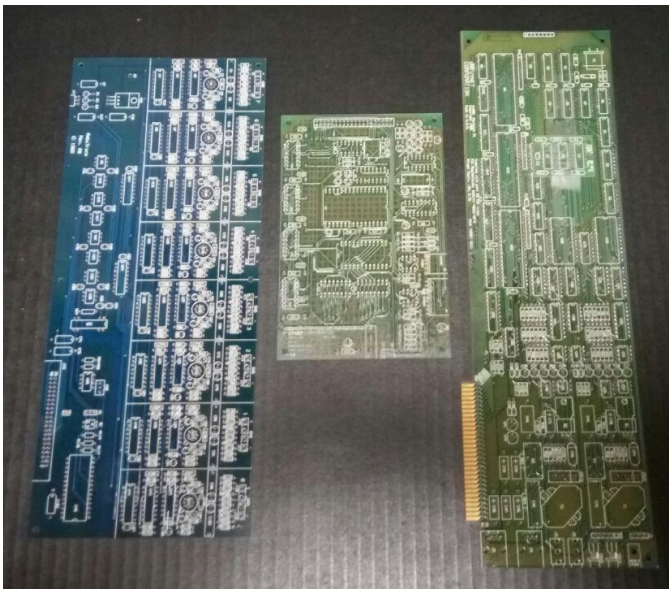
20 Claims, 5 Drawing Sheets



Several of our clients have allowed us to keep solder samples of their boards for our advertising purposes. A “solder sample” is a board that for one reason or another did not pass inspection during fabrication. These boards are usually marked with either a permanent

felt marker or are somehow defaced by drilling or cutting so that they won't accidentally go into production resulting in an unusable product. Sharon did the PC Board Layout design for all of these, Jerry designed all of them except as noted, and we manufactured at least the prototypes if not full production of all of them. Many boards contain microcomputer systems, Jerry programmed most of these.

These are some of the boards:



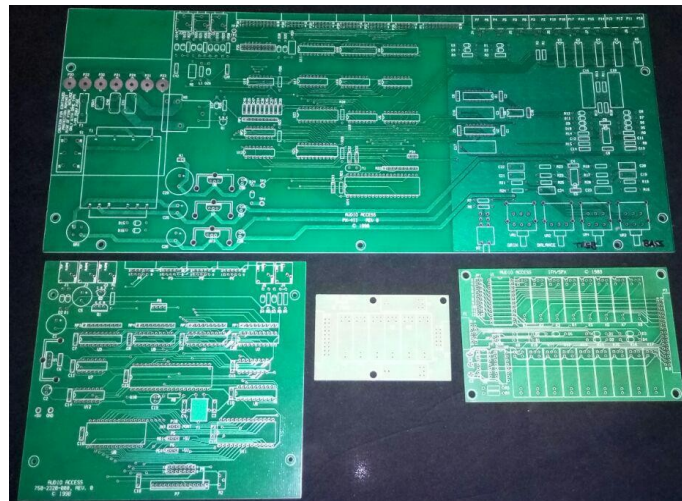
From Left: Ambutrace, Rev. A0, Vynet V400 SD, Rev. B2, Vynet V1000, Rev. A1.

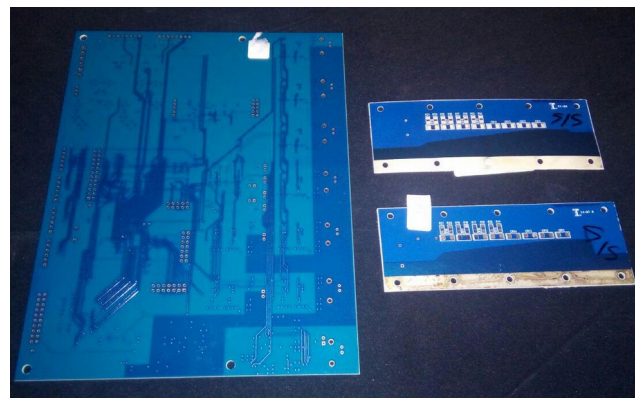
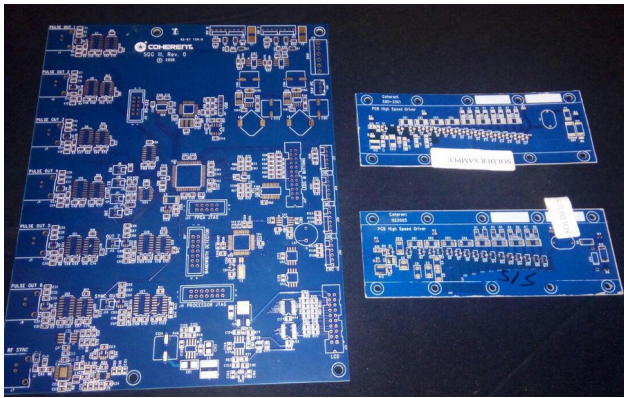
The Ambutrace board was the patient interface for medical equipment.

The V1000 board was designed by Jerry and one other engineer. It was the first mass produced computer sound board. This one was used for automated attendants and voice mail.

Top: Audio Access PX-4II, Rev. 0.
From Left: Audio Access 750-2320-000, Rev. 0, Audio Access IFM-A, Audio Access IFM-SPX.

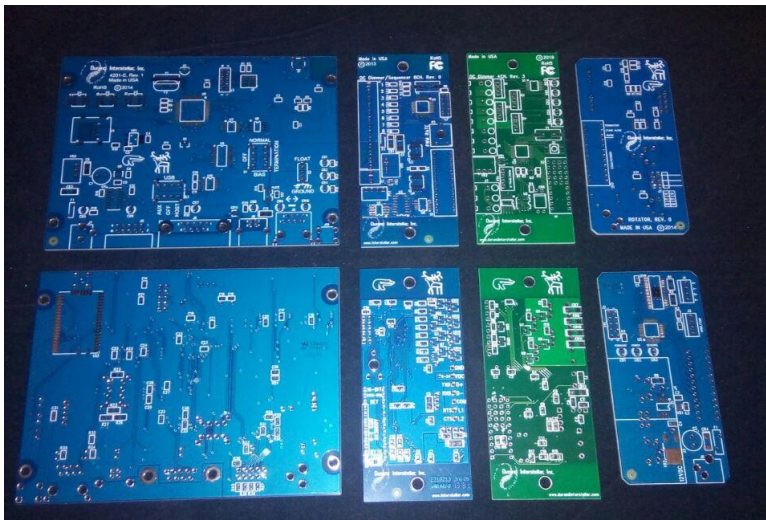
These are audio processing boards.





Above From Left: Coherent SDG III, Rev. 0, Coherent 580-3301, Coherent 1123005, front and back views.

The Coherent boards are various parts of a control system for research lasers used in major laboratories worldwide.

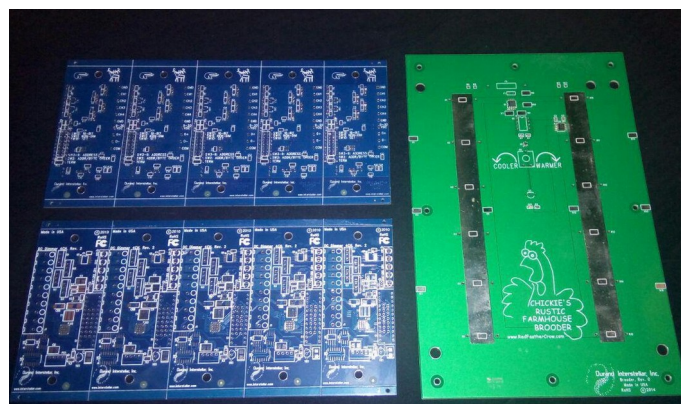


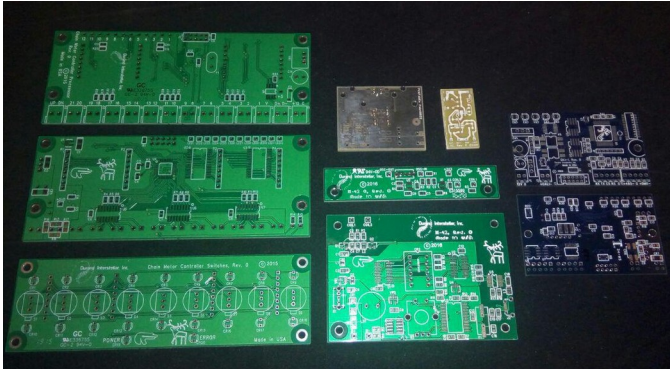
From Left and Top to Bottom: Durand Interstellar, Inc. 4201-C, Rev. 1, Durand Interstellar Inc. DC Dimmer/Sequencer 8CH, Rev. 0, Durand Interstellar, Inc. DC Dimmer 4CH, Rev. 3, Durand Interstellar, Inc. Rotator, Rev. 0, front and back views.

These are various theatrical lighting and motor control boards.

From Left: Durand Interstellar, Inc. DC Dimmer 4CH, Rev. 2, panel of 5 boards, front and back, Durand Interstellar, Inc. Brooder, Rev. 0.

These boards are for lighting control and a poultry warmer.



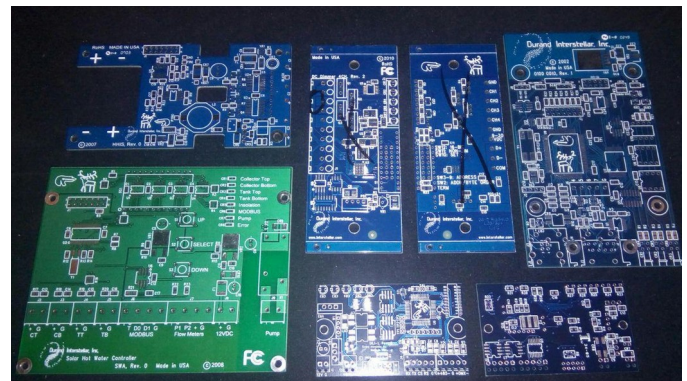


From Left, Top to Bottom: Durand Interstellar, Inc. Chain Motor Controller, Rev. 0, front and back, Durand Interstellar, Inc. Chain Motor Switch, Rev. 0.

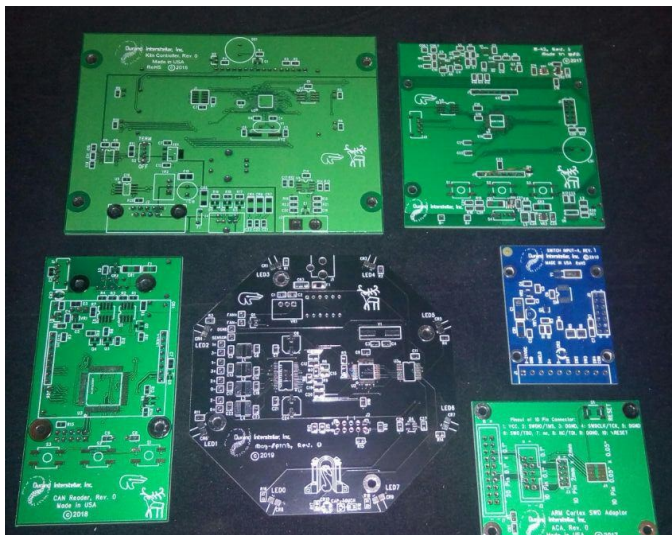
Middle, Top to Bottom: Durand Interstellar, Inc. PVP, Rev. 0, Arizona State University SD, Rev. 0, Durand Interstellar Inc. X-42 0, Rev. 0, Durand Interstellar Inc. X-42, Rev. 0, Durand Interstellar, Inc. DILI, Rev. 0, front and back.

These are theatrical and industrial controller boards for lighting, and motors.

From Left, Top to Bottom: Durand Interstellar, Inc. HHIS, Rev. 0, Durand Interstellar, Inc. SWA, Rev. 0.
Middle, Top to Bottom: Durand Interstellar Inc. DC Dimmer 4CH, Rev. 2, front and back, Durand Interstellar, Inc. DILI-1, Rev. 0, front and back.
Right: Durand Interstellar, Inc. 0100 0010, Rev. 1.



Pyrotechnic controller, solar photovoltaic controller, theatrical lighting.



From Left Top: Durand Interstellar, Inc. Kiln Controller, Rev. 0, Durand Interstellar, Inc. X-42, Rev. 1.

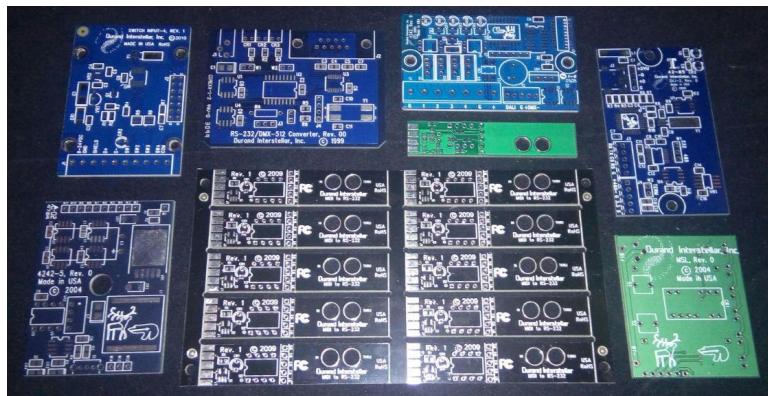
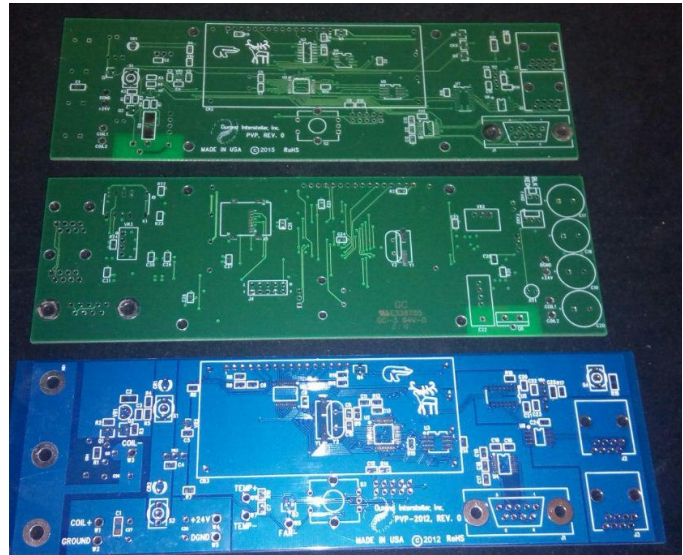
From Left Bottom: Durand Interstellar, Inc. CAN, Rev. 0, Durand Interstellar, Inc. Mag-Spin 8, Rev. 0.

Top to Bottom: Durand Interstellar, Inc. Switch Input-4, Rev. 1, Durand Interstellar, Inc. ACA, Rev. 0.

Industrial control, electric vehicle testing, theatrical control, industrial testing.

From Top: Durand Interstellar, Inc. PVP, Rev. 0, front and back, Durand Interstellar, Inc. PVP-2012, Rev. 0.

High voltage lighting controllers.



From Left Top to Bottom:
Durand Interstellar, Inc. Switch
Input, Rev. 1, Durand
Interstellar, Inc. 4242-5, Rev.
0.

Middle Top, Left to Right &
Bottom: Durand Interstellar,
Inc. RS-232 DMX-512, Rev. 0,
Durand Interstellar, Inc. 4242,
Rev. 0, Durand Interstellar, Inc.
MIDI to RS-232, single board.
Middle Bottom: Durand

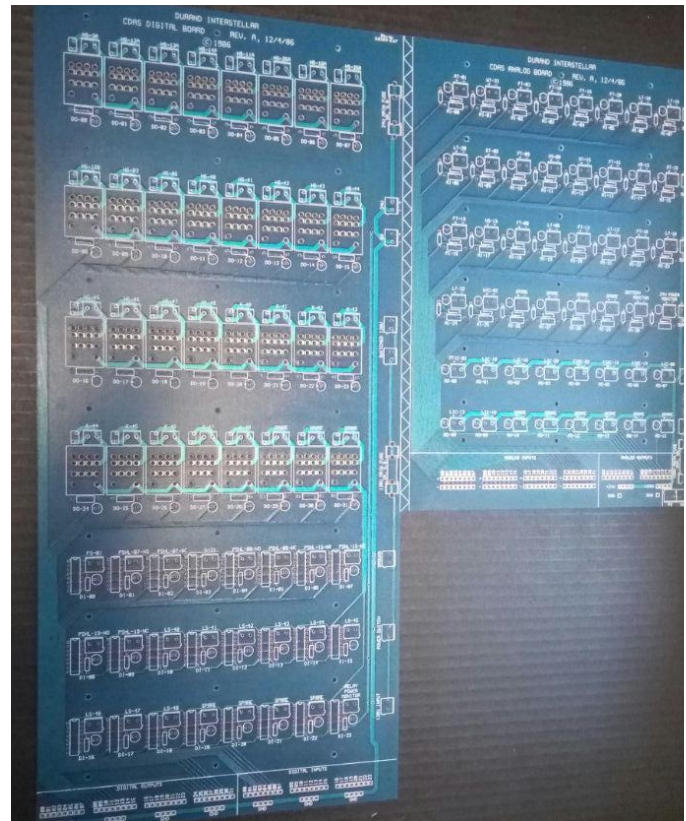
Interstellar, Inc. MIDI to RS-232, panel of 10 boards.

Right, Top to Bottom: Durand Interstellar, Inc. DILI, Rev. 2, Durand Interstellar, Inc. MSL, Rev. 0.

These are various theatrical controllers.

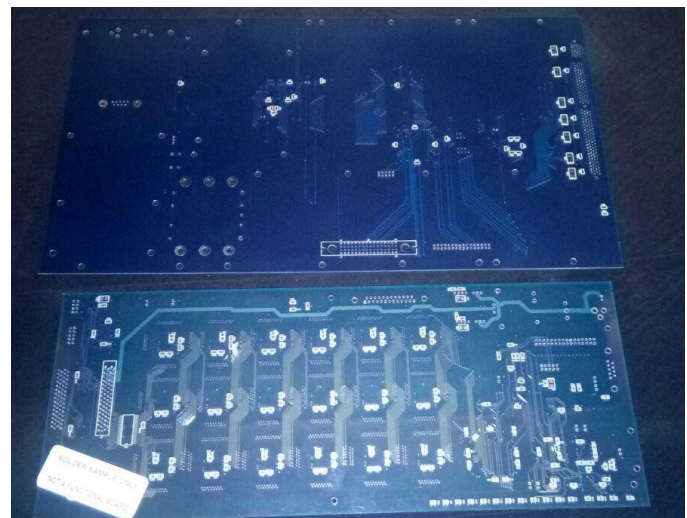
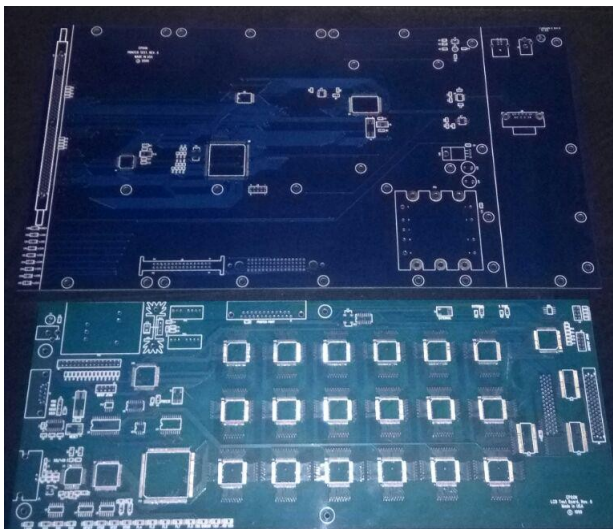
From Left: US Department of Energy,
Clean Coal Project CDAS Digital
Controller, Rev. A, Department of
Energy, Clean Coal Project CDAS
Analog Controller, Rev. A.

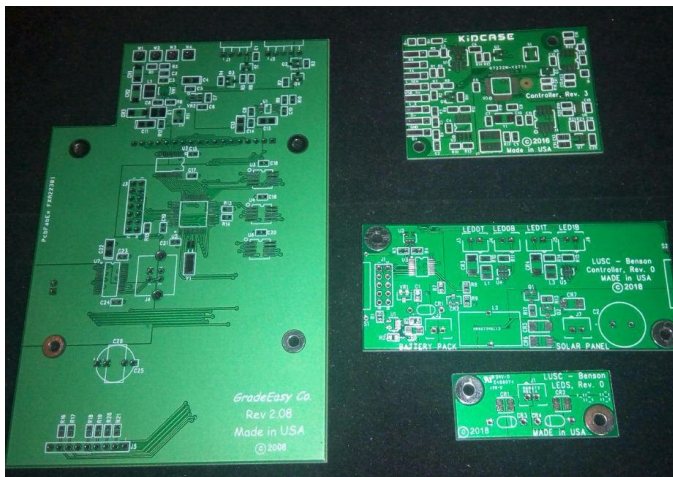
Used to run a prototype Coal Cleaning
facility.



Top: Epson Printer Test Board, Rev. 0, front and back.
Bottom: Epson LCD Test Board, Rev. 0, front and back.

Boards used for software development of high-end laser printers and video projectors.



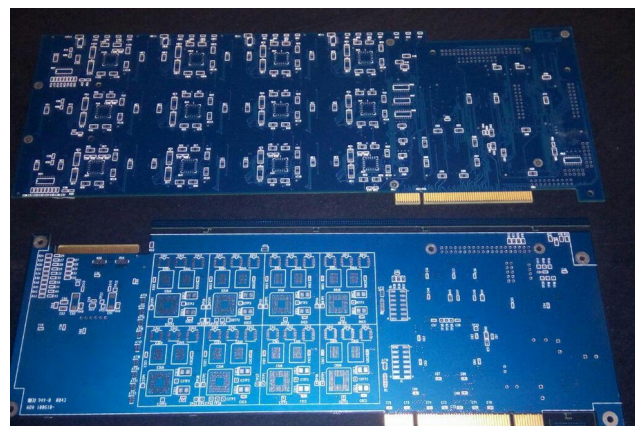
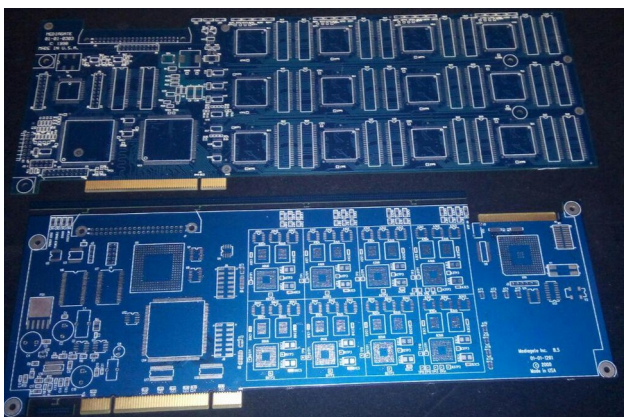
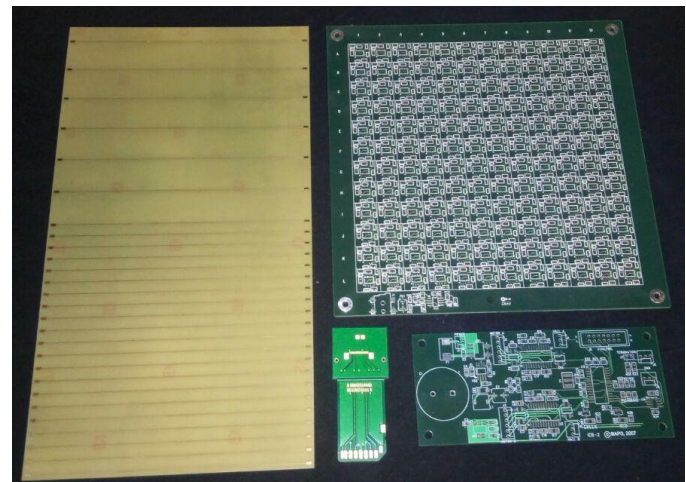


Left: GradeEasy, Rev. 2.08
From Top Right to Bottom: KidCase,
LUSC-Benson Controller, Rev. 0,
LUSC-Benson LEDS, Rev. 0.

Survey equipment, consumer child
monitoring of computer use, solar
powered advertising sign controller.

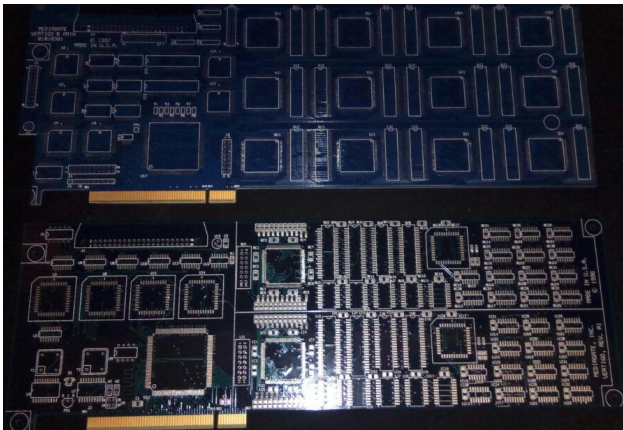
From Left: KidCase Sensitivity Sensor.
Top: Weavel Sensor.
Bottom Left to Right: USB Extender,
BAPS Controller.

Used in development of consumer
product, agricultural sensor, test board
for a university, intelligent lighting
controller.



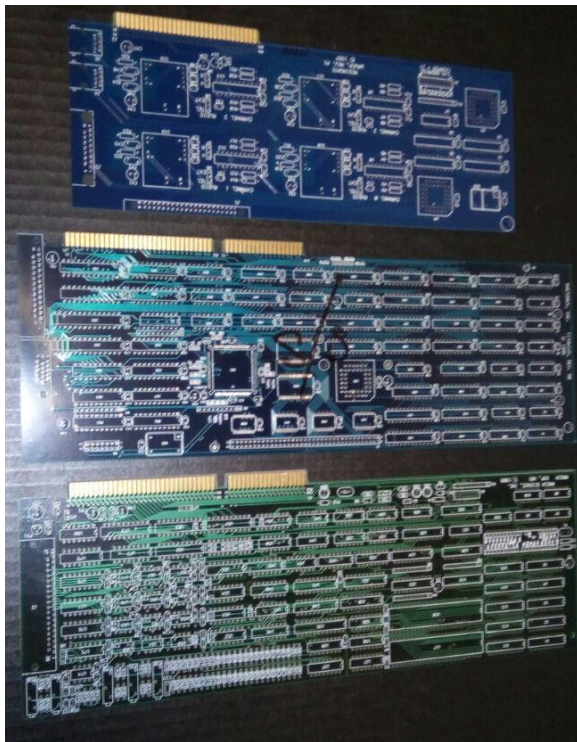
Top Left to Right: Mediagate 01-01-0303, front and back.
Bottom Left to Right: Mediagate 01-01-1201, front and back.

Telecom boards, voice mail + fax + dial-up modem.



Top Left to Right: Mediagate Vertigo B Main 01010301, front and back.
 Bottom Left to Right: Mediagate Vertigo, Rev. A1, front and back.

Telecom audio boards, record and play back for automated attendant and voice mail.

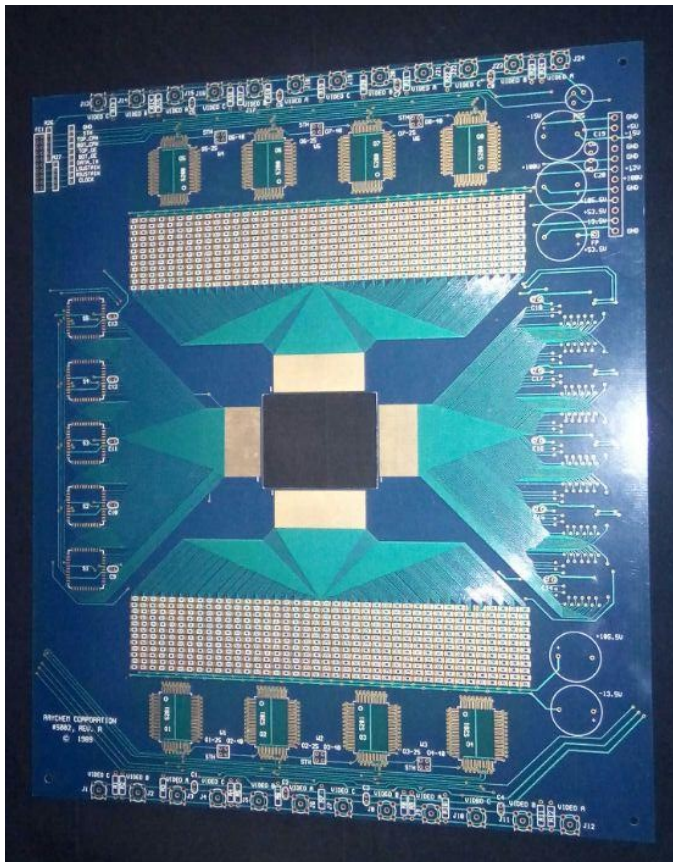


Left Top to Bottom: Mediagate Waver, Rev. A1, Rhetorex Titanium, Rev. A0, Areca Science DSP, Rev. V01.

Telecom audio boards, record and play back for automated attendant and voice mail.

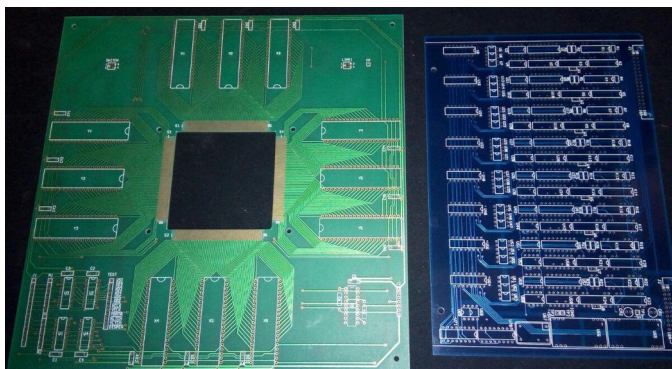
Right: Nufield Power: 4 experimental boards





Left to Right: Raychem Corporation #S002, Rev. A, front and back. Not designed by Jerry.

Very early HDTV prototype boards.

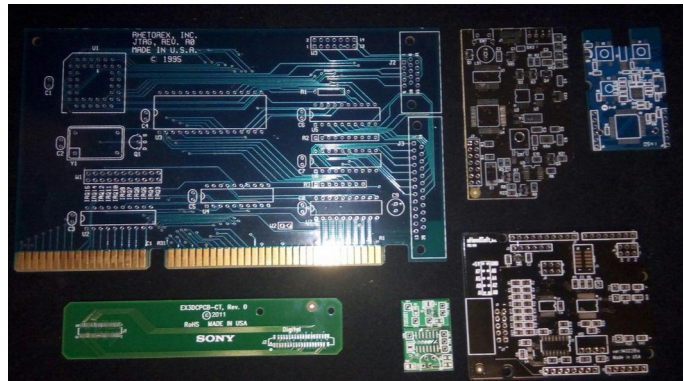


Left to Right: Raychem Corporation, Sleeptrace Corporation.

Raychem HDTV prototype not designed by Jerry.
SleepTrace medical testing board designed by Jerry.

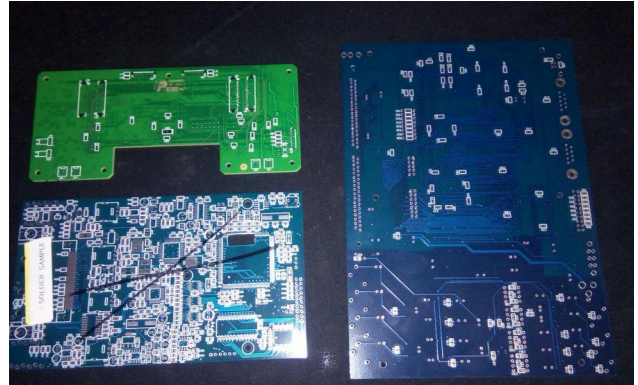
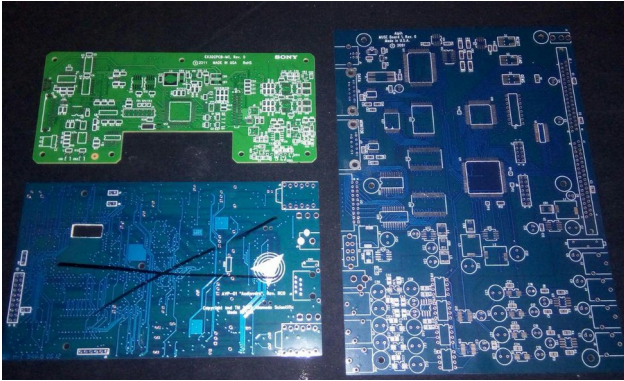
Top Left: Rhetorex JTAG Rev. A0.
 Bottom Left: Sony EX3DCPCD-CT,
 Rev. 0.
 Top Right: Lucidity Corporation 2
 boards.
 Bottom Right: aHandSoft 2 boards.

Rhetorex: Telecom
 Sony: 3D video camera board
 Lucidity: Sleep study board
 aHandSoft: development boards



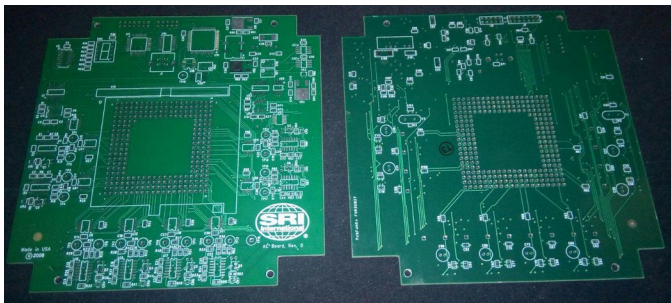
Left to Right: Softier VIPEX-1, Rev. 1.0
 front, Redwood IPM-960-03-99-01 front, Softier VIPEX-1, Rev. 1.0 back, Redwood
 IPM-960-03-99-01 back.

Softier: Video surveillance board.
 Redwood: Central office voice mail



Left Top to Bottom and to Right: Sony EX3DCPCB-MC, Rev. 0 front, Alameda Scientific AVP-01, Rev. RC0 front, Aliph MUSE, Rev. 0 front, Sony EX3DCPCB-MC, Rev. 0 back, Alameda Scientific AVP-01, Rev. RC0 back, Aliph MUSE, Rev. 0 back.

Sony: 3D video camera
Alameda: consumer audio
Aliph: telecom



Left to Right: SRI International AC Board, Rev. 0, front and back.

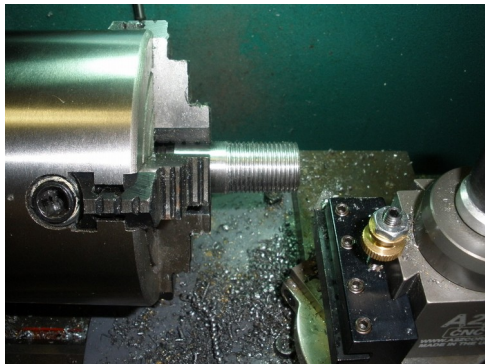
US Homeland Security sensor board.

Jerry also assisted with the custom chip design and gave a lecture on semiconductor device function.

After hiring outside companies to make mechanical parts for our prototypes and products, we started researching what we could do in our small office.

The first thing we purchased was a medium sized milling machine that could also be used as a drill press. We purchased the largest that we could afford which turned out to be fortunate for several projects. We found this was very helpful and saved us a lot of time and money so over the years we added to our tools as needed and budget allowed.

Using the milling machine to modify our lathe. Machine tools are very handy for making/repairing other tools.



Cutting threads on a metric to imperial thread adapter.

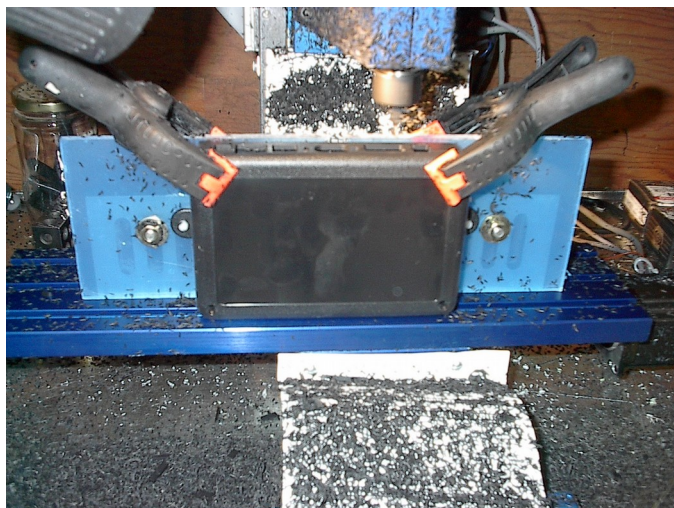
Finished adapter.



Making custom brackets (lower left) for a customer's product.

Jerry designed them and we used a small computer controlled milling machine to cut them out.



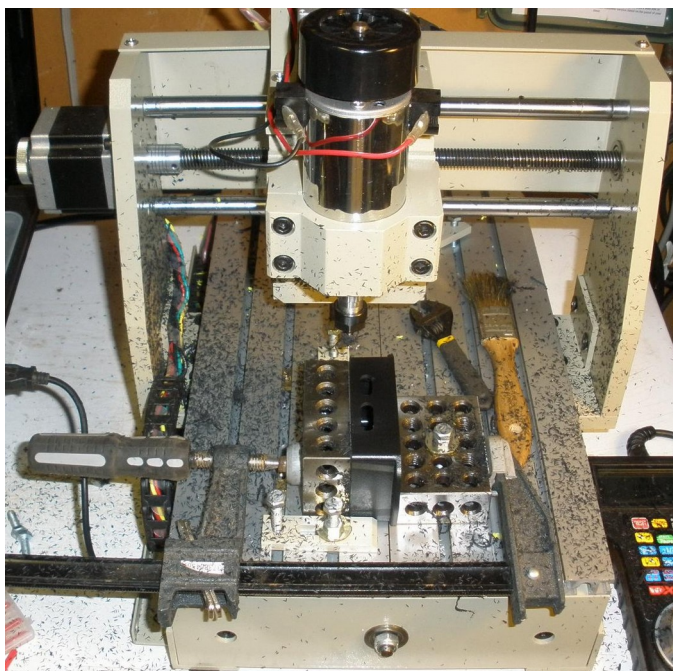


Cutting holes in one of our lighting controller enclosures.

Making holes in an enclosure for a customer's product.

This is for a water sensor used in diesel fuel systems.

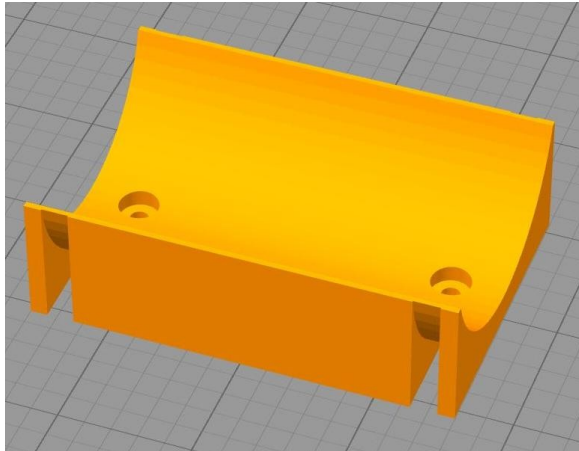
This shows a second small computer controlled milling machine we purchased for use with plastic enclosures.



We expanded into 3D printing to facilitate the construction of mechanical parts that were either not easily available or had to be custom made for products. The 3D printer for us was a way of making mechanical components such as spacers, buttons, knobs, mounting brackets and enclosures for use in some of our electronic and mechanical designs.

We also started making 3D printed items for other companies and have purchased additional 3D printers.

We don't have photos of everything as they were simply parts of devices we designed and built for customers. Where a photo doesn't exist there will be a CAD drawing of the item.



CAD drawing of a support bracket for a custom device

A support bracket for a lighting dimmer board.



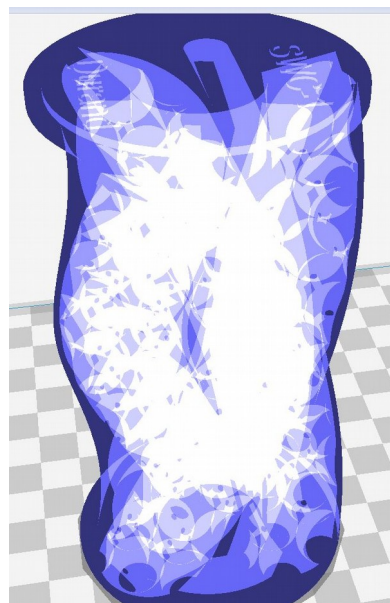
Parts 3D printed for another company.

These were designed by us and are part of fuel conditioners.

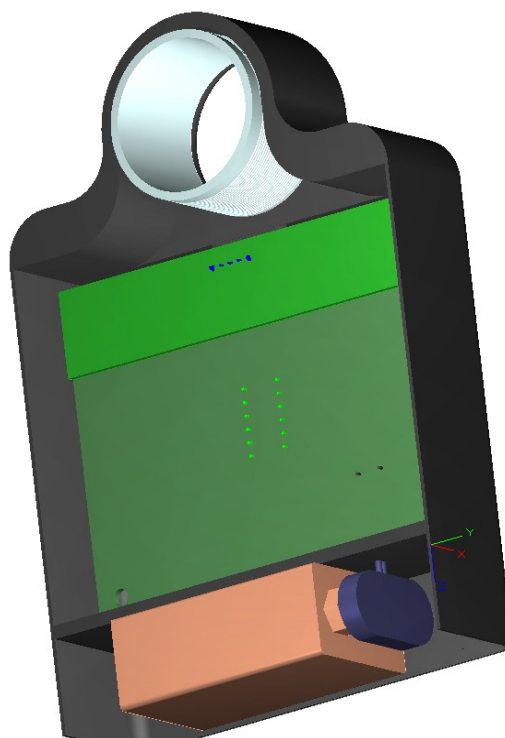
The core of our Spiral Water Cascade Structured Water Device (see the section below on structured water for more information). This is one of our regular 3D printed products.



Shown to the right is a CAD drawing of the complex interior that could only be made with a 3D printer or lost wax casting.



A CAD drawing of an enclosure for our X-42 prototype. Cover to the left and interior to the right.



3D printed parts designed by us for another company.

These were designed by Jerry and are part of an industrial fuel storage system.



CAD drawing for the enclosure for the CAN test device custom designed and produced by us for a client.

A few years back, a friend of ours who was something of an Internet celebrity, talked Jerry into coming up with a better design for a device for structuring water. It was something that our friend was currently into and promoting on his web page. Most of what was available on the market was hand made and very expensive. Our friend knew that Jerry had gotten into 3D printing and thought that something could be made that way.

The concept of structured water comes from the fact that people are drawn to water from natural sources, they don't really know what it is about it, they just know that it's somehow "better". Researchers have found that water flowing over pebbles in a stream takes on a more structured form and this seems to be what many people are seeking. Since we all can't drink directly from a flowing clear mountain stream, devices have been made to structure water.

Jerry agreed and started working out a design. This became our PWC, short for Pyramidal Water Cascade. As you pour water in the top, the water is separated and flows over a number of spheres that are in a triangular shape with a hexagon in the middle. At the bottom of these spheres, the water is gathered together to concentrate the effect and then it flows over more spheres in a smaller triangle. This repeats until finally the concentrated water flows over a single sphere and then out through a hole in the bottom of the PWC and into your waiting jar, mug, or other container.



We sent one to our friend to experiment with. He loved it and surprised us with a video promoting it on his web page. By the next day, we had hundreds of orders with more coming in every day from all over the world. Since it takes almost 7 hours to print one of these, it took us a several months to fulfill all the orders. It was much appreciated income in our sagging economy, but we begged our friend to please warn us when he decides to do something like this in the future and to warn his fans that we can't deliver these instantly.

One of our customers reported on a social forum that she decided to try structuring tequila in a cafe during Mardi Gras in New Orleans. She reported it made the tequila so strong that she had to go take a nap to sleep it off. That got some of the followers to try structuring different alcoholic beverages. It was decided that wine didn't work well as it had too much sediment and beer had too many bubbles. But, other distilled

beverages worked well. We thought, well why not come up with a version of the PWC designed specifically for distilled beverages.

Since we were planning Russia as our destination, we thought vodka was the ideal choice. Being a clear liquid, it would flow the best and not clog the balls in the mechanism with sugars or sediment.

Jerry began working on a design for it and modeled it after a Soviet era rocket with a removable “dust cap” nosecone. We named it *Za Druzyei* after the Russian toast **За Друзей!** (To Friends!). He put a lot of work into making sure it wouldn't leak and would properly guide the flow, so the vodka actually flows through chambers suspended inside the rocket housing on small struts with special air vents that come up from the rocket booster engines on the sides. It's all printed at one time by the 3D printer. The consensus of opinions was that the structuring process made the vodka smoother.



We received many requests for structuring larger quantities of water so we came up with the Spiral Water Cascade. This is a larger model that is designed to connect into a water system. We currently offer two models, one for under sink use with a small filter and one that can be connected into larger pipes for use with greenhouses and other volume uses. We've been told plants really like the structured water.

We are also working with another company on fuel and water structuring devices for industrial and agricultural use. That will come into production in the future.

For now, we are concentrating on keeping our business focused on our move into our new house, getting things together in anticipation of a great new future in the best place on Earth. We have a lot of items to sort out, many parts and prototypes that belonged to customers have to be returned, sold, or scrapped. We also have to find out which of our machines can be shipped while finding homes for the rest.