



Nathan Seidle



I am a bad engineer.

Nathan Seidle

Quick Background

- Stop me any time
- 2004 Univ. Colorado @ Boulder
- BS in Electrical Engineering
- Rower on CU club team
- RA in dorms
- Worked 2002 Olympics
- Twenty Eight
- Oklahoma
- No other family business experience



Problem

- 2002 - Building prototype – blew up
- Cheapest source was Bulgaria

Problems:

- Website was iffy
- No online checkout
- Fax to Bulgaria?!
- CC info to Bulgaria?!
- Shipping was \$\$
- Wait 2-3 weeks



More Problems

Makes sense: Import to US and ship out

But US Distributors were also very bad

- No easy checkout – I want to spend my money!
- Bad pictures
- No shipping costs

Got to be a better way!

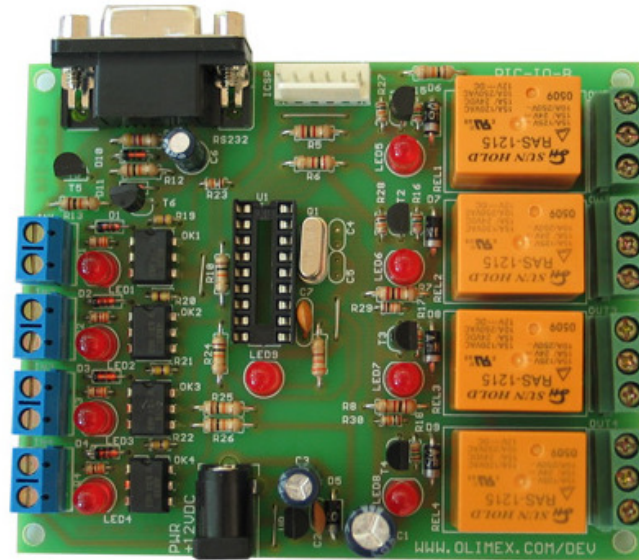
- Cleaner
- Easier to checkout
- Big, crisp pictures
- Stock supporting items

There was opportunity!
Spark Fun was born...

◊ [PIC-P28-USB-20MHz](#), Protoboard for 28-pin PIC. Includes FTDI USB-RS232. \$34.95



◊ [PIC-P40-USB-20MHz](#), Protoboard for 40-pin PIC. Includes FTDI USB-RS232. \$34.95.



◊ Olimex PIC-IO, 4 Relay, 4 Optoisolator. Does not include a PIC Processor. Suggested processors are PIC16F

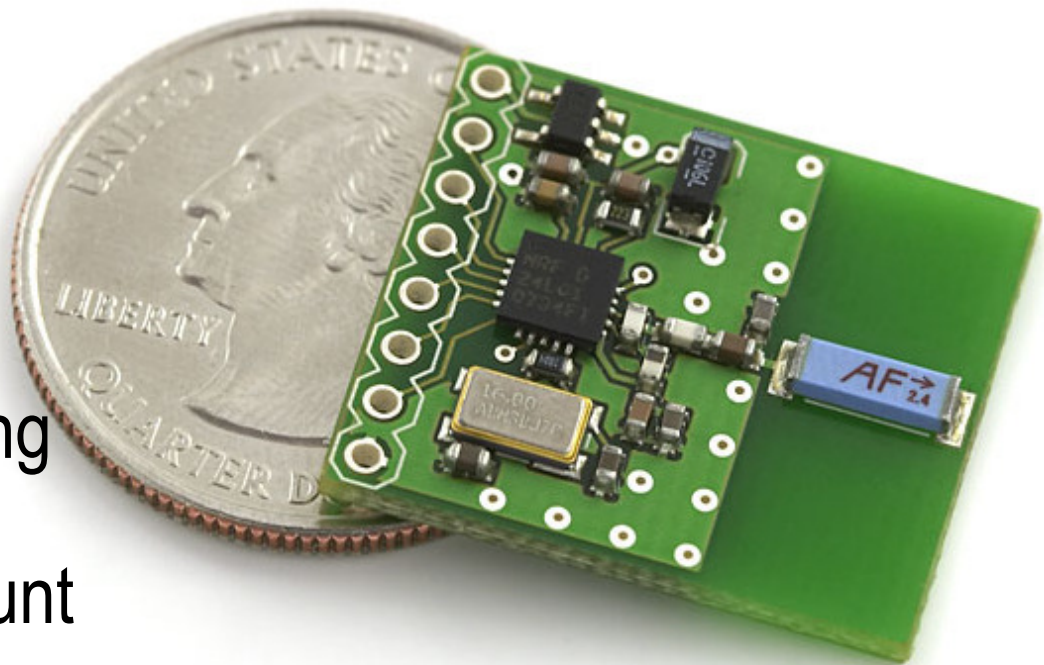
Initial Business Problems

- EE != Business Background
- What's a 'mark up'?
- How much do I charge?
- Needed to limit my risk with an exit strategy
- Blew out shoulder with concussion – 2002
- Business plan was written in lodge at Copper
- The 'business plan' applied for 4 months



Starting Your Own...

- 1) Purchase Stock
- 2) Obtain Federal Tax ID (aka EIN)
- 3) Obtain State Sales Tax License (CR 100)
- 4) Get speeding ticket
- 5) Roll out website
- 6) Test checkout – PayPal
- 7) Make live
- 8) Cross fingers
- 9) Open a business banking account
- 10) Apply for city tax account



Funding

Raising Capital

Raised in Rounds?

All different types:

- Venture Capital

- Angel Investors

- Equipment Loans

- Government Financing

- Etc.

SFE Funding

Initial \$2500 in good old credit card debt

4 months later \$4000 'student' loan

Family purchased 3 'shares' at \$250 each

Each share now worth \$50,000

Initial Stock

Olimex was main line of products

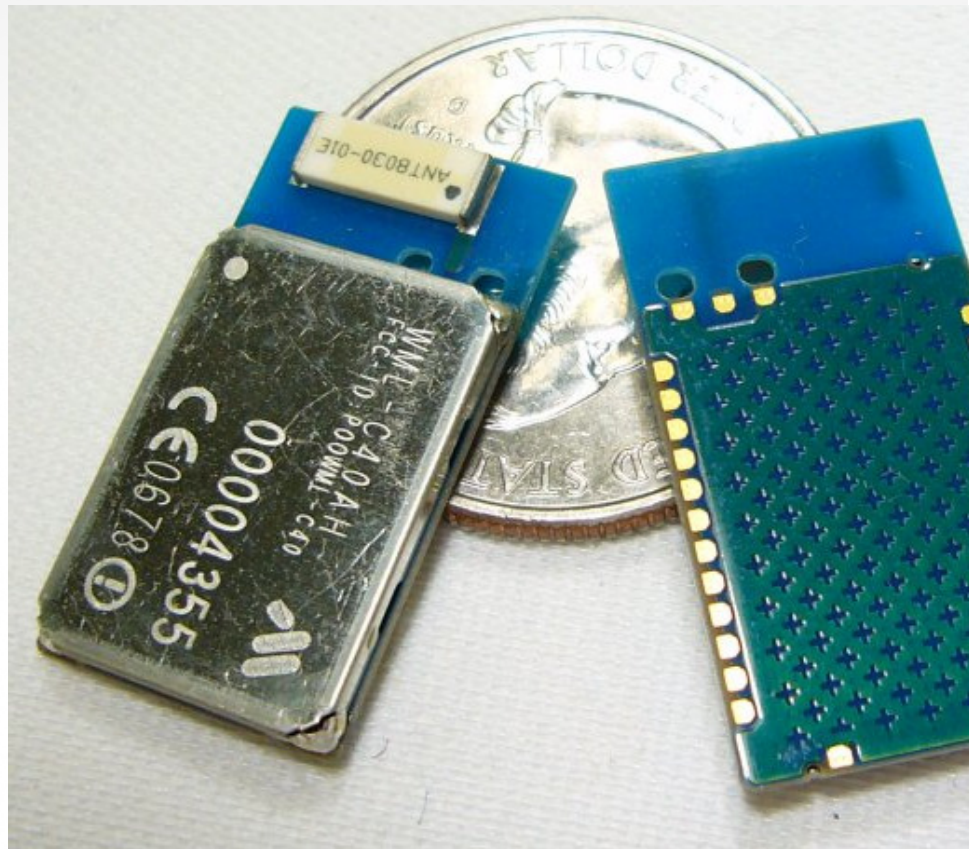
- Bought 1 of every item

Purchased peripheral items

- ICs
- Cables
- Power supplies

Purchased office goods

- Scale
- Shelf
- Tape gun
- Dead bolt
- Website



Spark Fun Early Days

- 1st order came through in 7 hours
- 3rd order was from France
- 5th order was for qty 3 of one item
- Dumpster diving in Eng Center
- 100% PayPal for 3 months
- Applied for 'Merchant Account'
- We/Us/I'll talk to Shipping



A Tale of 20,000 Orders

- Original/Old site:
 - 10,000 orders
 - 3 years
 - No inventory control
- Clean/New site:
 - 10,000 orders in 9 months
 - Real-time order data
 - Data-mining
- ROI = 10 days



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Product Info

RoHS✓

IMU 6DOF Razor - Ultra-Thin IMU

sku: SEN-09431

Description: There's a lot of punch packed into this little IMU. The 6DOF Razor makes use of ST's LPR530AL (pitch and roll) and LY530ALH (yaw) gyros, as well as the popular ADXL335 triple-axis accelerometer, to give you six degrees of measurement on a single, flat board.

All analog outputs of the gyros (1x and 4x amplified) and accelerometer are broken out to the 0.1" pitch headers. The gyro outputs have a full scale of $\pm 300^\circ/\text{s}$, while the outputs of the accelerometer have $\pm 3\text{g}$ range.

There is no on-board regulation, so you'll need to provide a clean 3.3VDC power source, which will power all three sensors. All filtering capacitors and other components are included as shown on the pictures.

Features:

Pricing



46 in stock
backorder allowed

\$89.95

\$80.96

\$71.96

price

10-99 (10% off)

100+ (20% off)

1


quantity

 [add to cart](#)







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Display prices in

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SparkFun Tree

Nathan
EQG

| People | Pete Engineering 11 Tech Support | Chris IT 7 | Trevor COO 23 Admin Shipping Sales Accounting Customer Service Purchasing HR | Jordan CFO 7 | AnnDrea Marketing 5 | Matt Production 26 Testing |
|--------|---|------------------|--|--------------------|---------------------------|-------------------------------------|
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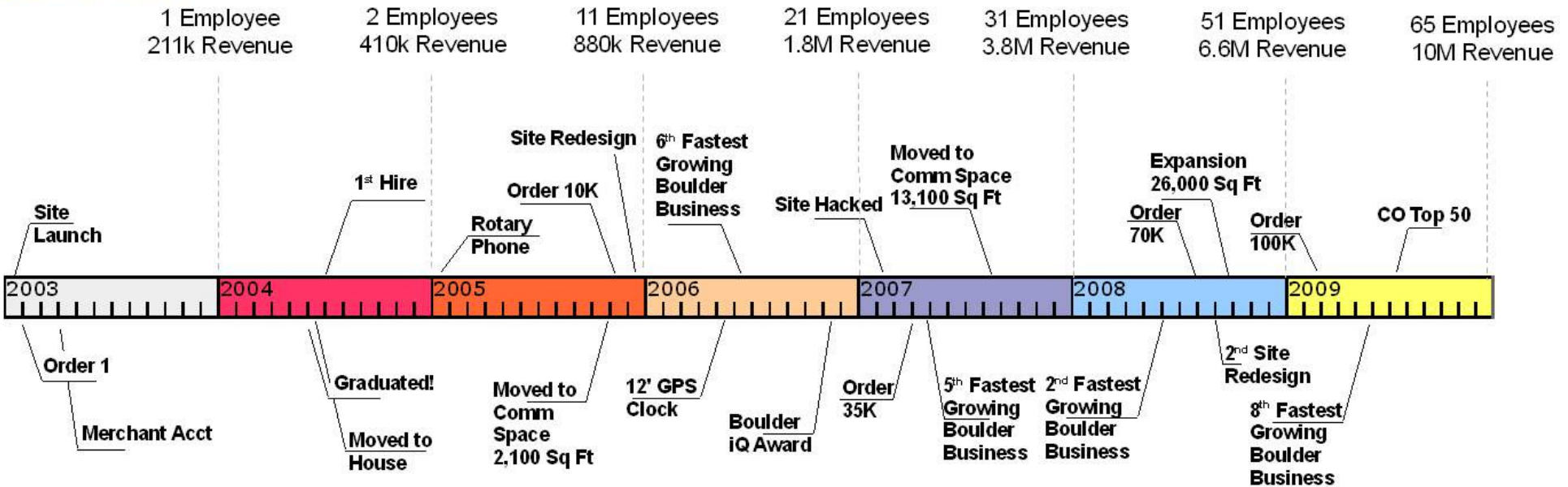
Culture

- How did we find such great people?
- Friends, acquaintances, Craigslist
- Created rules as if it was a place I wanted to work
- A what policy?



Timeline

SparkFun History

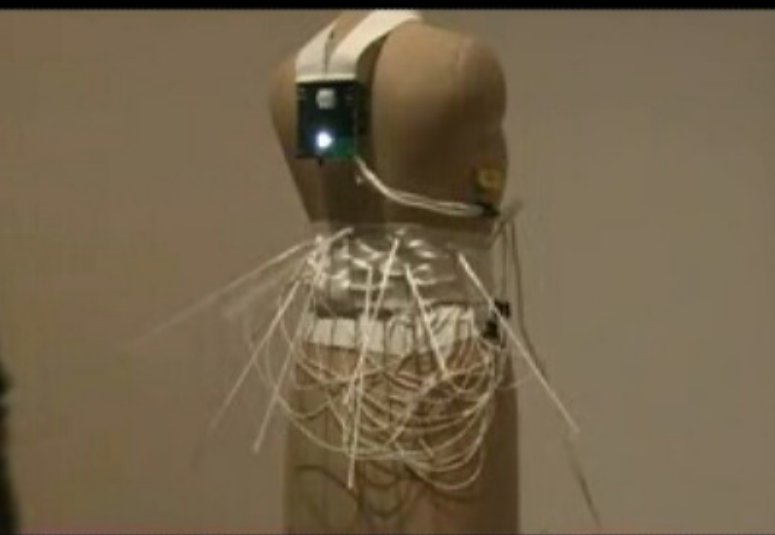


Outside

05:54:09

- Stop worrying and plug it in.
- If it sparks, unplug it.
- If it smokes, turn it off.
- If it heats up, check it, and plug it back in.
- Don't be afraid of trying something new. That's when your having the most fun.

It's how you use it...



Questions?



pockets and purses,
tucked inside the Mini-
to crank up the mu-
sic, just dial up a song with
the Nano's scroll wheel
and push Play.

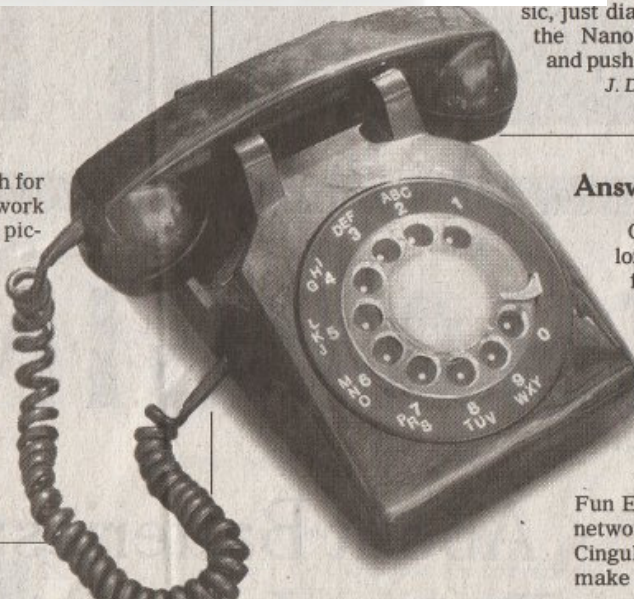
J. D. BIERSDORFER



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BIGGS



Answer the Phone, and Amaze Your Friends

Commissioner Gordon, Batman's lone friend on the Gotham police force, never had it so good. The Port-O-Rotary, which comes in red or black, holds a secret — and no, it does not turn on a signal in the Batcave. It's an old desk phone that has been re-wired to work as a cellphone, keeping the loud, clanging ringer.

The Port-O-Rotary, from Spark Fun Electronics, works with most G.S.M. networks, including those of T-Mobile and Cingular. It uses the carrier's SIM card to make a connection and is powered by a

large battery that requires the removal of two screws to recharge. Each phone is custom-made.

The phone's makers warn that the Port-O-Rotary is for entertainment purposes only, and that the audio is not quite as clear as with a modern phone. At \$400 for a black phone and \$500 for the red version, this is some pricey entertainment.

The Port-O-Rotary weighs about two pounds and is available online only at www.sparkfun.com, where its creators have posted a play-by-play on how they morphed a 50-year-old phone model into a wireless wonder.

JOHN BIGGS