Connectivity beyond the last mile
Our mission is to globally deploy low-cost gigabit connectivity to everyone in the world.
“Gigabit technology is a fundamental shift in the way everyone will communicate.

We are talking about world-changing economic and business implications, as well as society at large.”
Where will the next technology breakthrough occur?

Killer Apps?  Big Data?
Heavier compression?
Faster processors?  Faster OS?

NO

Change will have to come from the networks
Redstone has developed a scalable wireless gigabit technology that delivers connectivity all end-users from the core of the network to beyond the last mile.

A quantum leap from current 4gLte/5g.

No longer is bandwidth and distance an issue.

This is a new communications frontier that enables telecommunications companies to rapidly deliver wireless enterprise networks, connected vehicles, wearables, telematics and the Internet of Things everywhere!
We’ve broken the chain…
A major shift in mobile communications, enabling a global transformation of the connectivity is finally here!

802.11xx
Circa 1985

Redstone PHY Engine™
2013

The Redstone PHY Engine™ is our physical-layer, wireless chip technology that provides low cost, ubiquitous gigabit connectivity.
What is the Physical Layer, and How Does it Affect Wireless Technology?

Networks are traditionally recognized as being comprised of 7 layers, also known as the OSI Network Model.

The very first layer of the network is called the Physical Layer (also known as Layer 1).

That physical layer is the basic foundation of the network. The network will never be more than what the fundamental nature of the physical layer will allow.

The physical layer of a network is like the DNA in human beings. Human DNA serves as the genetic blueprint for what the human body can do, physically and mentally and is the building block for a human being's potential.

Like an Olympic runner or a heavy-weight boxer has to have the right physical DNA to become world class athletes.

Cutting edge communications networks have to have the proper physical layer in order to deliver world class communication technologies such as 3D HD, holographic experience, game-playing and video conferencing.
Redstone Benefits

**Low capex/opex**

Efficiencies in current spectrum

Additional 100x more bandwidth in pioneered spectrum

Physical layer ASIC can be built into anything

Green and sustainable - Switches can live off the grid to go anywhere

Fully scalable beyond the last mile

Dedicated connectivity - no sharing of bandwidth

Increase SPEED & capacity in current market area deployments

Quick to market
Finally, wireless that blows open the ubiquitous computing experience

<table>
<thead>
<tr>
<th>Feature</th>
<th>Bluetooth</th>
<th>Cellular (3G, 4G, LTE)</th>
<th>WiFi</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gigabit Speed</td>
<td>✓</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Scalable Capacity</td>
<td>✓</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Unobservable Security</td>
<td>✓</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Dedicated Connectivity</td>
<td>✓</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Ultra-Long Battery Life</td>
<td>✓</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Micro-Sized</td>
<td>✓ ✓</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Anywhere Range</td>
<td>✓</td>
<td>x</td>
<td>x</td>
</tr>
</tbody>
</table>
Current Wireless Connectivity
- Intermittent
- Media latency
- Not secure
- Not dedicated
- Not fast

Gigabit Wireless Connectivity
- Consistently secure connections
- Hyper-rich media streaming
- Gigabit speed
- Scalable capacity to any need
- Dedicated speed of connectivity
- Ultra-long battery life
- Microsized / Right-sized

Complex Architecture / Large Footprint
- Equipment X
- Equipment X
- Router
- Router
- Router

Complex Connect:
many unsecured connection points

Range:
30 - 50 Feet

Simple Wireless Architecture / Small Footprint
- Router
- Wireless router

Direct Connect:
switch to end-user (secure connect)

Range:
Distributed connectivity
to any distance – no limit

Gigabit Wireless Connectivity
- Consistently secure connections
- Hyper-rich media streaming
- Gigabit speed
- Scalable capacity to any need
- Dedicated speed of connectivity
- Ultra-long battery life
- Microsized / Right-sized
Transformational Wireless Architecture

Rapidly Deployable Wireless Infrastructure

Self Contained Wireless Deployment Unit
Ultra-Low Energy Consumption Simple Installation

Dedicated Gigabit Connectivity
Live Network Deployment
Dedicated Gigabit Wireless - Anywhere it's Needed

- Urban City Center: Mobile Gigabit Connectivity
- Local Fiber Ring
  - Fiber Nodes
  - Internet Backbone
  - Content Servers
  - Anywhere in the Field
- Residential Neighborhood: Dedicated Gigabit Connectivity
- Any-Mile Wireless Infrastructure
- 5G Sub-6 GHz Micro-Sized Wireless Network Infrastructure
- Dedicated Gigabit Wireless Connectivity Extended to Any Area
### Dedicated Speed Delivers Ubiquitous Connectivity

<table>
<thead>
<tr>
<th>Service</th>
<th>Required Bandwidth</th>
</tr>
</thead>
<tbody>
<tr>
<td>HD Digital Video Security</td>
<td>$6 \times 75 \text{ Mbps} = 450 \text{ Mbps}$</td>
</tr>
<tr>
<td>Holographic Signage</td>
<td>$2 \times 140 \text{ Mbps} = 340 \text{ Mbps}$</td>
</tr>
<tr>
<td>Individual Interactive Connectivity</td>
<td>$21 \times 5 \text{ Mbps} = 105 \text{ Mbps}$</td>
</tr>
<tr>
<td>Streaming Internet 4K Video</td>
<td>$1 \times 475 \text{ Mbps} = 475 \text{ Mbps}$</td>
</tr>
<tr>
<td>Total Dedicated Connectivity Required in Area</td>
<td>$1,370 \text{ Mbps}$</td>
</tr>
</tbody>
</table>

**Summary: Total Dedicated Connectivity Required in Area**

- $1,370 \text{ Mbps} = 1.37 \text{ Gbps}$

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**Diagram Notes:**

- **HD Digital Video Security**
  - 75 Mbps
  - 75 Mbps
  - 75 Mbps
  - 75 Mbps
  - 75 Mbps

- **Holographic Signage**
  - 75 Mbps
  - 75 Mbps
  - 75 Mbps

- **Individual Interactive Connectivity**
  - 75 Mbps
  - 75 Mbps
  - 75 Mbps

- **Streaming Internet 4K Video**
  - 475 Mbps

- **Total Dedicated Connectivity Required in Area**
  - 1,370 Mbps
  - 1.37 Gbps
A movement for an entire industry

Redstone will help migrate the industry by inviting visionary business leaders to participate in its Early-Adopter Program.

This program provides development of live pilot systems to address your specific market needs.

You will have access to exclusive opportunities to gain a 24 month head-start in monetizing the market transition to global gigabit connectivity.

We can start now...to build a new future

To find out how to get started... please see me today.
Pioneers in gigabit wireless..let’s connect!

Thank You

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