

Giga-IR High Speed Opto- communication



Infra-red Data Communication
Giga-IR SIG www.irda.org

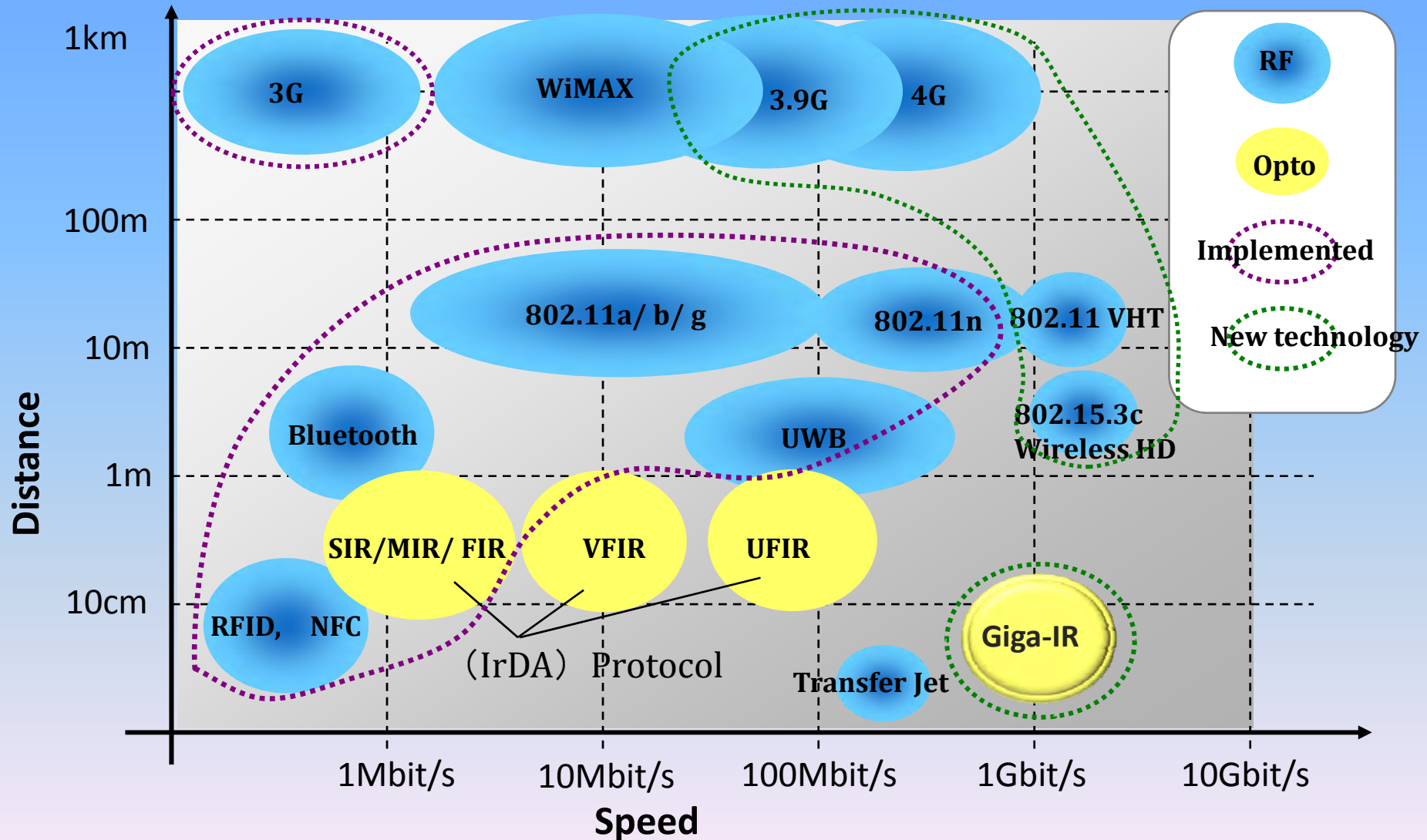
Market Needs

Market needs to consolidate the data into one single handset



Demands for fast speed
data transfer

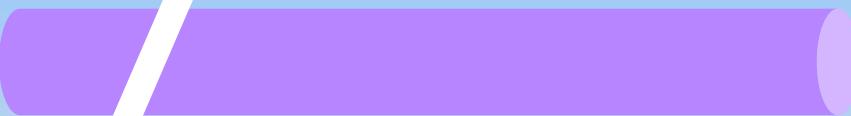
Where does it fit in the wireless communication?



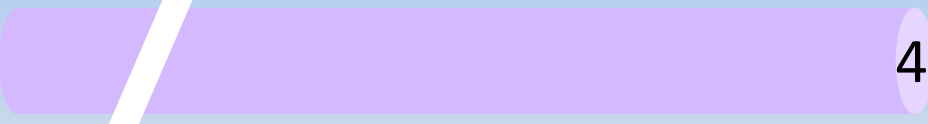
100MB Data Transfer Speed Comparison



Giga-IR **1Gbit/s** **0.8 Sec**



3 min 20 sec



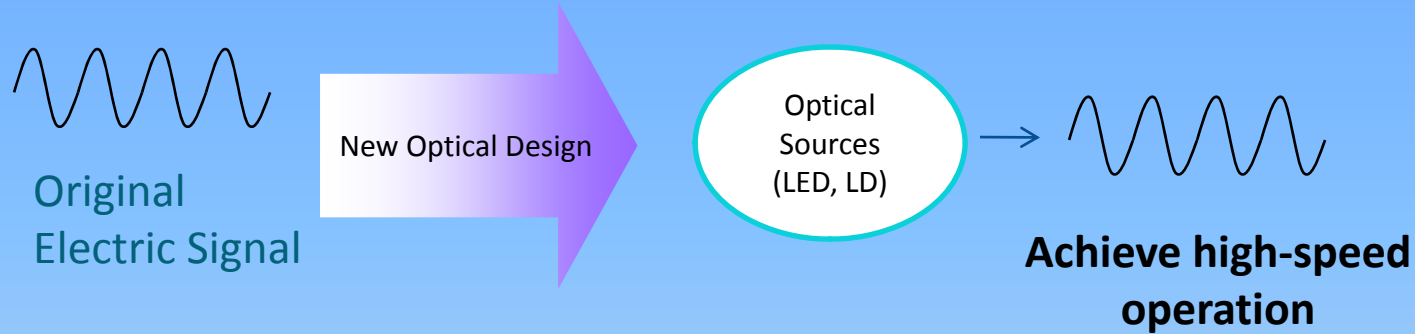
4 min 27 sec

IrSimple™ 4Mbit/s

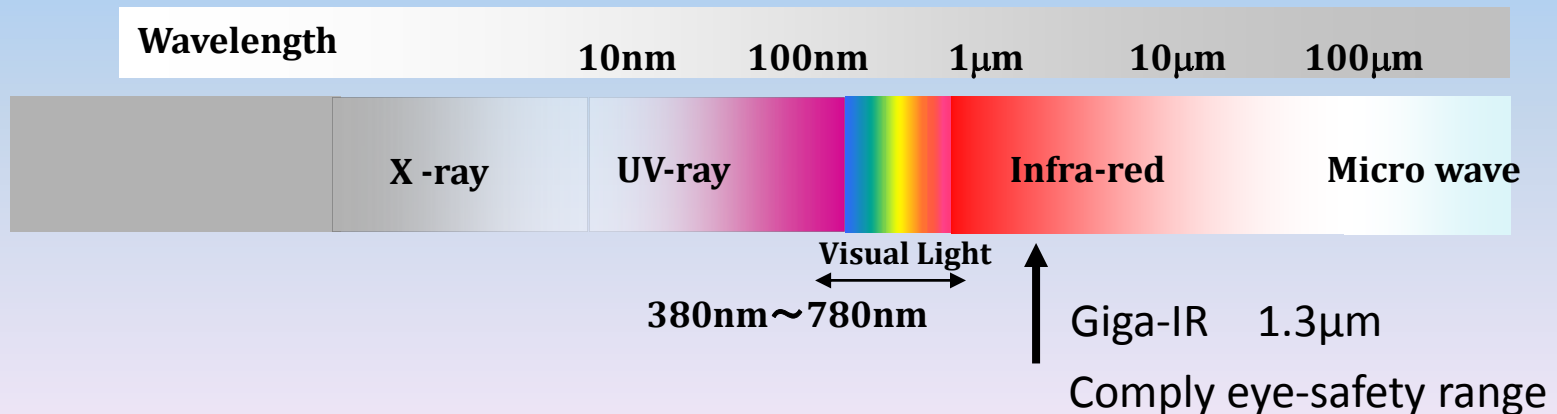
Bluetooth® 3Mbit/s

Key Consideration in designing Giga-IR

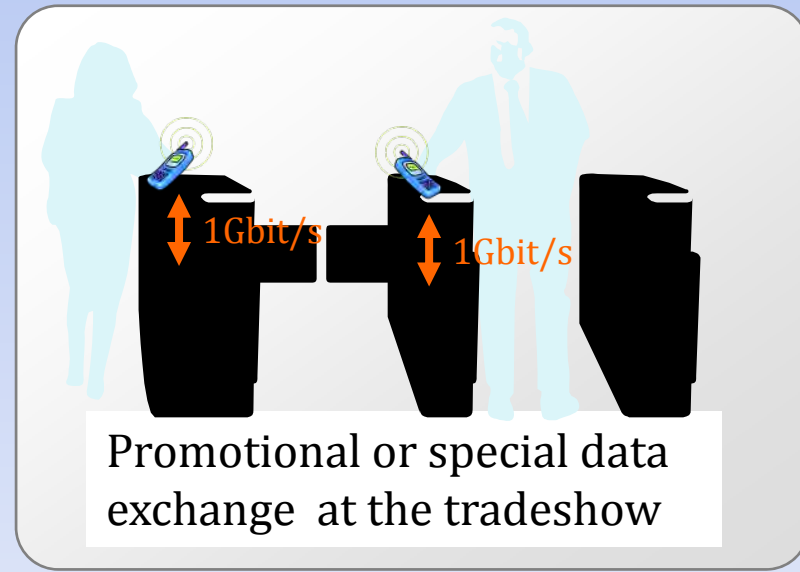
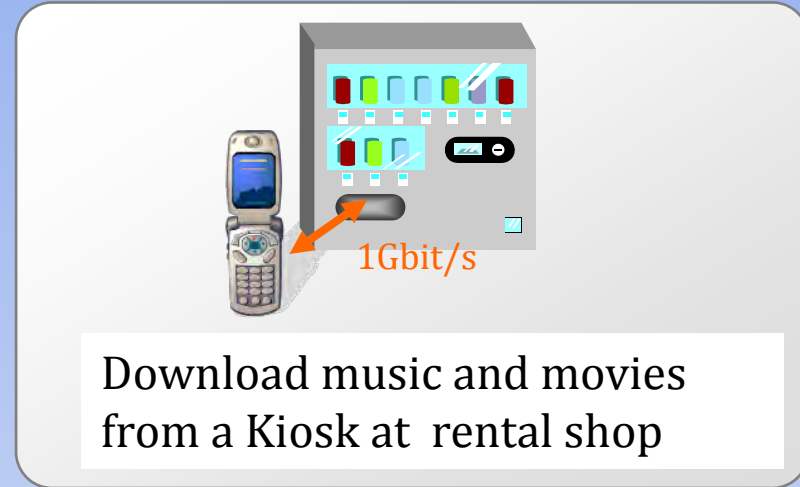
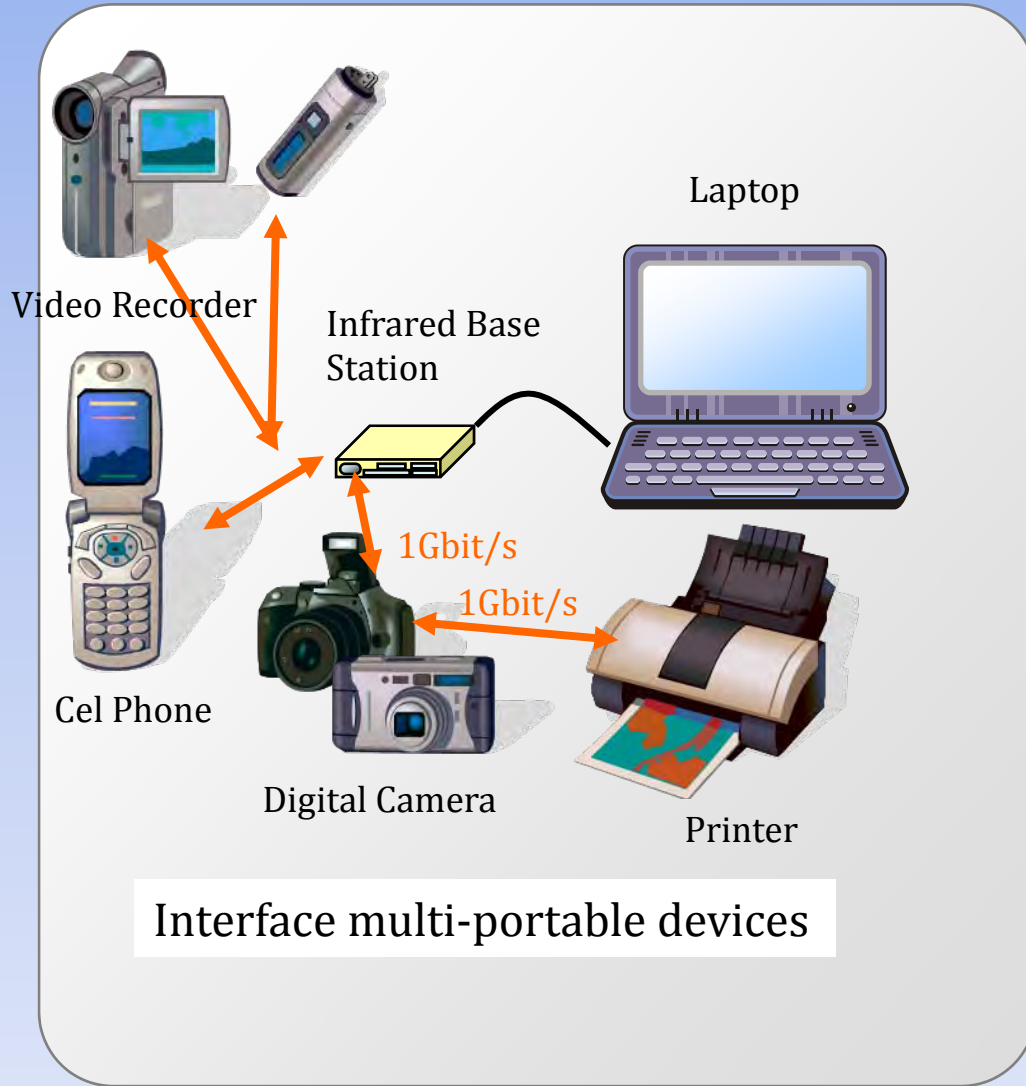
Maximize the opto-wireless technology



Giga-IR wavelength – Eye Safety first



Examples of using Giga-IR



Features and Benefits of Giga-IR

Summary



Fast : $\geq 1\text{Gbit/s}$

- 250 times faster than conventional IrDA interface.
- 10 times faster than FTTH (Fiber To The Home)
- Download music file 20 to 30 songs within a second



Secure : Line of sight

- Provide secure connection for your personal and private data



Compact : Size of the optical element
3×3×8mm max.

Giga-IR Cornerstones and Future Plans

Creation of SIG (Special Interest Group) in December 2007

Members of SIG

E-Gloaledge, KDDI, Panasonic

Scheduling

2008 March

2008 September

2009 March

Directional

1st Specification
To be voted

Final

