

Mesh Technology Cheat Sheet



TECHNOLOGY		APPLICATION/USABILITY	GO TO MARKET	ECOSYSTEM		FUTURE
Mesh Technology	Data Rate	Application Development	Example Devices	Ecosystems	Ecosystem Penetration	Roadmap
Bluetooth Smart AKA Bluetooth Low Energy (mesh optional)	1-2 Mbps	Bluetooth SDK includes radio, networking & app layer	Mobile phones Light bulbs	Every mobile phone HomeKit Google Home Amazon Echo & Dot	Robust mobile ecosystem, focused on consumer products	Bluetooth standards are constantly evolving, maturing and improving. The dedicated Bluetooth SIG continues to push Bluetooth towards new applications and capabilities. Bluetooth & BLE remain very consumer-centric and may still be a ways off from general acceptance in industrial settings (outside of limited use cases).
Zigbee (inherently mesh)	250, 40, & 20 Kbps	Flexible development Allows custom definition of radio, networking & app layers Zigbee & Thread share the same radio layer (2.4GHz 802.15.4)	Many smart home devices, including Amazon Echo Plus & iControl / Xfinity Home Smart meters Green energy Light bulbs	Smart Home Security Systems Service Providers (Xfinity) Smart Buildings	High market share in smart homes, IoT applications, and industrial, non-consumer markets	Zigbee is evolving to be more interoperable and therefore, more attractive for consumer applications. Zigbee is working to establish standards and evolve its certification process.
Thread (inherently mesh)	250 Kbps	Networking stack only	Smart home devices* Smart sensors and buildings*	Zigbee ecosystem by way of Dotdot	Usable standards and well documented Builds on Zigbee capabilities	Thread functions as a networking layer for Zigbee and enables IP-based addressability and functionality over Wi-Fi. Thread is shifting focus to commercial building applications. Very strong in data routing, security, and accessibility.
Proprietary	Varies	Full stack, but SDKs limited	Door locks Other home security devices	N/A	Single supplier	Limited roadmap, fractured ecosystem, and remain often at the whim of single vendors.