

The logo for Wireless Tech RERC features a stylized human figure with a blue wireless signal icon above its head. The text "Wireless Tech RERC" is displayed in a bold, dark blue sans-serif font, with the figure and signal icon integrated into the word "Tech".

Wireless Tech RERC

Mainstream Tech News 2022 Editions

Table of Contents:

[November 2022](#)

[October 2022](#)

[September 2022](#)

[August 2022](#)

[July 2022](#)

[June 2022](#)

Your Mainstream Wireless Tech News

We hope to learn from each other in the center. If you find any useful or informative news about mainstream wireless tech, please share for future editions.

Send articles, videos, podcasts to:
[**ask179@pitt.edu**](mailto:ask179@pitt.edu)

Wireless RERC

Mainstream Tech News November 2022

Welcome, Wireless RERC team! As part of an innovative team, it is important to be aware of how companies and organizations are improving and integrating Mainstream Wireless Tech.

We encourage you to learn more about any, or all, of the information in this edition. These updates can be helpful for current research or future projects and collaborations.

International Day of Persons with Disabilities:

Although this newsletter recaps mainstream wireless tech updates and articles from November, we also want to look ahead to International Day of Persons with Disabilities, December 3, 2022. The theme this year is “Transformative solutions for inclusive development: the role of innovation in fueling an accessible and equitable world.”

The central premise of the 2030 Agenda for Sustainable Development, which began in 2015 as the United Nations celebrated its seventieth anniversary, is to “leave no one behind,” and to collaboratively find innovative solutions for and with persons with disabilities to make the world a more accessible and equitable place.

The annual observance of the International Day of Persons with Disabilities on December 3 was proclaimed in 1992 by the United Nations General Assembly resolution 47/3. More information can be found on [the United Nation’s \(UN\) website](#).

December 3, 2022
**International Day of Persons
with Disabilities (IDPD)**



Your Mainstream Wireless Tech News

We hope to learn from each other in the center. If you find any useful or informative news about mainstream wireless tech, please share for future editions.

Send articles, videos, podcasts to:
ask179@pitt.edu

View past editions at:
wirelessrerc.pitt.edu

Wireless Tech RERC

Mainstream Tech News November 2022

What Do You Know About Matter—the New Smart Home Interoperability Standard?



What kinds of smart home devices are currently covered in the Matter categories?

Smart lighting, smart plugs, smart thermostats, smart shades, smart sensors, and smart locks are currently covered in the Matter categories. Smart security cameras and smart doorbells are currently not included, but they are in the list of the new device categories coming next (although a timeline is not clear at this moment).

What is a Matter Controller?

A Matter controller is a device or application that can add and control Matter devices. Matter is an application layer standard, meaning it sits over an existing communication protocol. There are three protocols that a Matter controller can support: Matter-over-Wi-Fi, Matter-over-Thread, and Matter-over-Ethernet. A Matter controller can support one, two, or all of these. Apple and Samsung have several **Matter Controllers available on the market.**

Are there any Matter devices available now?

While many companies announced their support for Matter and there are over 190 products now Matter certified or close to gaining certification, there are few Matter devices on the market now. You can check this **library on Matter certified products.** Many of these certified products are expected to hit the market in 2023. **Meross Matter Smart Wi-Fi Plug Mini** is available to purchase, which should work with any Matter Controller on the market.

Your Mainstream Wireless Tech News

We hope to learn from each other in the center. If you find any useful or informative news about mainstream wireless tech, please share for future editions.

Send articles, videos, podcasts to:

ask179@pitt.edu

View past editions at:
wirelessrerc.pitt.edu

The logo for Wireless Tech RERC features a stylized human figure with a blue head and a blue body, positioned between the words "Wireless" and "Tech". Above the figure is a blue Wi-Fi symbol. The word "RERC" is in a larger, bold, blue font to the right of "Tech".

Wireless Tech RERC

Mainstream Tech News November 2022

Tech News:

Four ways Amazon is making Alexa and its devices more accessible — Amazon's accessibility improvements include Tap to Alexa, Text to Speech, Audio Streaming for Hearing Aids (ASHA), and Reading Ruler. Tap to Alexa enables interaction with Alexa through touch. Text to Speech, only available on Fire tablets, enables users to type a phrase then tap an icon to have it spoken out loud. Select Fire TV devices support Audio Streaming for Hearing Aids (ASHA). Reading Ruler on the Kindle reading app can help improve a reader's concentration and focus by highlighting a book's text, making it easier to follow along.

Emergency SOS Via Satellite Available on iPhone 14 Phones in the US and Canada — iPhone 14 users can now connect with emergency services when cellular and Wi-Fi coverage are not available. This service requires no additional software and will be included for free for two years starting at the time of activation of any iPhone 14 model.

Aqara's New Cube Can Control Your Smart Home — The Cube T1 Pro lets you push, flip, twist, shake, or tap the cube to activate your smart home devices or scenes. It shows up as six wireless buttons in Apple Home and six motion sensors in Alexa. Matter support is coming soon.

Google Pixel's At a Glance Widget Adding Control Over Timers on Nest Hub and Other Devices — The At a Glance widget on Google Pixel devices shows contextual information, such as activities seen by the Nest Doorbell, earthquake alerts, commute details, weather forecasts, and timers from the Google Clock app, Nest Hub, and other Google Assistant speakers.



Your Mainstream Wireless Tech News

We hope to learn from each other in the center. If you find any useful or informative news about mainstream wireless tech, please share for future editions.

Send articles, videos, podcasts to:
ask179@pitt.edu

View past editions at:
wirelessrerc.pitt.edu

Wireless RERC

Mainstream Tech News November 2022

Tech News (continued):

Android Fitness Apps like Peloton and MyFitnessPal Now Can Share Data Via Health Connect — Android has released **Health Connect** into public beta, a new app that assimilates data from across eligible health and fitness apps through a single platform.

Amazon Alexa is on Pace to Lose \$10 Billion This Year — Amazon is planning to eliminate some 10,000 jobs amidst failures to monetize Alexa devices. Although Alexa's Echo line is among the best-selling items on Amazon, the company is making money when devices are bought, not when they are used.

Speech Accessibility Project — This interdisciplinary initiative led by the University of Illinois Urbana-Champaign with support from Amazon, Apple, Google, Meta, and Microsoft, aims to improve speech technology for people with a range of diverse speech patterns and disabilities. Currently, there is a **free speech recognition app** by Voiceitt for people with speech disabilities, disorders, or impairments. Their new app, now in Beta, is available for Android, iOS and PC.



Follow the Wireless RERC on Social Media



Your Mainstream Wireless Tech News

We hope to learn from each other in the center. If you find any useful or informative news about mainstream wireless tech, please share for future editions.

Send articles, videos, podcasts to:
ask179@pitt.edu

View past editions at:
wirelessrerc.pitt.edu

Wireless RERC

Mainstream Tech News October 2022

Welcome, Wireless RERC team! As part of an innovative team, it is important to be aware of how companies and organizations are improving and integrating Mainstream Wireless Tech.

We encourage you to learn more about any, or all, of the information in this edition!

Tech Event:

- **Wireless RERC Apple Accessibility (Hybrid) Event** — Thursday, November 10, 10:00AM-12:00PM. Attend in person (limit 30 in-person attendees) or virtually to learn about built-in accessibility features for vision, hearing, mobility, and cognitive support needs on both MacOS and iOS. Register at: pitt.zoom.us/meeting/register

Tech Initiative:

- **FCC Program to Support Broadband Access** — The Affordable Connectivity Program (ACP) provides a discount of up to \$30 per month toward internet service. A household is eligible if least one of the following criteria is met: Medicaid, SSI, Veterans Pension or Survivor Benefits, received a Federal Pell Grant in the current award year, and more.

Tech News:

- **The Matter Smart Home Standard Is Now Available**



Matter launched this month, and promises to simplify the smart home experience, from purchase, to set up, to use. Now, instead of buying into a specific ecosystem, you can look for the Matter-capable seal of interoperability. Matter will also provide better privacy with local control (**Thread** and Wi-Fi, rather than the cloud). This means even if your internet goes down, your smart home will still work.

Your Mainstream Wireless Tech News

We hope to learn from each other in the center. If you find any useful or informative news about mainstream wireless tech, please share for future editions.

Send articles, videos, podcasts to:

ask179@pitt.edu

View past editions at:
wirelessrerc.pitt.edu

Wireless Tech RERC

Mainstream Tech News October 2022

Tech News (continued):

- **Samsung Electronics and Google Expand Partnership to Elevate Smart Home Experiences** — The partnership will give more flexibility and choice, as Samsung and Google build on multi-admin, allowing users to find, choose to connect and control Matter-enabled devices through SmartThings or Google Home apps on Android.
- **Microsoft Adaptive Accessories Now Available** — Microsoft released their Adaptive Accessories on October 25. Microsoft's Adaptive Accessories include the Xbox Adaptive Controller, the Microsoft Adaptive Mouse, the Adaptive Hub (a central connector with wireless buttons in place of a traditional keyboard), and Adaptive Buttons including the D-pad, joystick, and dual-button.
- **When Will the iPhone Be Forced to Use USB-C?**
The European Parliament voted overwhelmingly (602 for, 13 against, and 8 abstentions) in favor of new legislation that would eventually require all mobile phones sold in the EU to use a USB-C port for wired charging.
- **Apple Introduces Ask Apple for Developers**
A new series of interactive Q&As and one-on-one consultations that will provide developers with more opportunities to connect directly with Apple experts for insight, support, and feedback.



Your Mainstream Wireless Tech News

We hope to learn from each other in the center. If you find any useful or informative news about mainstream wireless tech, please share for future editions.

Send articles, videos, podcasts to:
ask179@pitt.edu

View past editions at:
wirelessrerc.pitt.edu

Wireless RERC

Mainstream Tech News October 2022

Tech News (continued):

- **[Over-the-Counter Hearing Aids: Research, Then Shop](#)** — What to know and where to turn for help regarding FDA-approved over-the-counter hearing aids that are now available at stores, pharmacies, and online.

Tech Releases:

- **[Google Pixel Watch Review: It's a Smarter Fitbit](#)** — An in-depth review highlighting both the positives and negatives of Google's first-gen compactly designed smartwatch.
- **[Amazon Fire HD 8 Plus \(2022\) Review](#)** — A deep dive into Amazon's Fire HD 8 tablet. The review highlights the affordability, USB-C and wireless charging, but notes barriers with accessing Google apps (specifically YouTube) and services.
- **[Apple Unveils Completely Redesigned iPad in Four Vibrant Colors](#)** — The updated iPad features a large 10.9-inch Liquid Retina display, A14 Bionic chip, advanced cameras, fast wireless connectivity, USB-C, support for the new Magic Keyboard Folio, and more.

Follow the Wireless RERC on Social Media



Your Mainstream Wireless Tech News

We hope to learn from each other in the center. If you find any useful or informative news about mainstream wireless tech, please share for future editions.

Send articles, videos, podcasts to:
ask179@pitt.edu

View past editions at:
wirelessrerc.pitt.edu

Wireless RERC

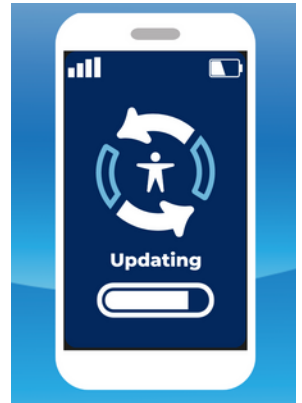
Mainstream Tech News September 2022

Welcome, Wireless RERC team! As part of an innovative team, it is important to be aware of how companies and organizations are improving and integrating Mainstream Wireless Tech.

We encourage you to learn more about any, or all, of the information in this edition. These updates can be helpful for current research or future projects and collaborations.

Tech News:

- **[Google Accessibility Update](#)** — Google’s Sound Notifications accessibility feature on Android now allows users to record and add their own sounds to the library for future recognition. Watch a **[minute-long video on Google’s YouTube](#)** about this update.
- **[Apple iOS 16 Accessibility Updates](#)** — A guide to Apple’s new accessibility features on iPhone, iPad, and Apple Watch.
- **[Apple Home App Update](#)** — An overview of the Home app’s refreshed design as part of the iOS 16 release. Updates in the overhauled experience include a new UI and iconography, customizable sections, fresh wallpapers, and more.
- **[Apple Watch Ultra Review](#)** — A look at some of the positives and negatives of Apple’s newest multisport watch, featuring an Action button, a third physical control. Learn **[how to use the Action button’s](#)** set of preselected shortcuts or “actions,” that include Workout, Stopwatch, Flashlight, and more.



Your Mainstream Wireless Tech News

We hope to learn from each other in the center. If you find any useful or informative news about mainstream wireless tech, please share for future editions.

Send articles, videos, podcasts to:
ask179@pitt.edu

Wireless RERC

Mainstream Tech News September 2022

Tech News (continued):

- **Amazon Announces Halo Rise** — A new, multi-purpose bedside no-contact tracker with a smart alarm and wake-up light. Halo Rise will start shipping later this year—you can **sign up to be notified when Halo Rise is available**.
- **Four New Echo Devices and Echo Studio Audio Upgrades** — Amazon announced the next generation of Echo Dot and Echo auto, as well a new generation of Echo Dot Kids, and audio improvements to Echo Studio.
- **Echo Dot Fifth Generation Updates** — The new models have twice the bass, include a temperature sensor, and **double as Eero mesh Wi-Fi extenders**.
- **Amazon Releases New Fire TV Cube** — New features include HDMI input for controlling cable boxes and Wi-Fi 6E support, which promises cleaner bandwidth for streaming and less overall wireless network congestion.
- **New Alexa features for at home and on-the-go** — The latest Alexa features offer more ways to stay entertained, personalize Alexa interactions, automate smart home, remain connected, and support loved ones from afar.

Follow the Wireless RERC on Social Media



Your Mainstream Wireless Tech News

We hope to learn from each other in the center. If you find any useful or informative news about mainstream wireless tech, please share for future editions.

Send articles, videos, podcasts to:
ask179@pitt.edu

Wireless Tech RERC

Mainstream Tech News August 2022

Welcome, Wireless RERC team! As part of an innovative team, it is important to be aware of how companies and organizations are improving and integrating Mainstream Wireless Tech.

We encourage you to learn more about any, or all, of the information in this edition. These updates can be helpful for current research or future projects and collaborations.

Tech News:

- **How to Create Alexa Routines** — Simple tips to utilize Alexa routines, shortcuts for all the things – or “actions” – Alexa can do.
- **Use Alexa routines to make back-to-school easier** — Make your back-to-school routine better with these smart home tricks.
- **What does virtual reality feel like?** — NBC highlights CMU’s work on adding haptics (feels) to virtual reality.
- **Economic Impact of Digital Inclusion** — A UK Report by the Centre for Economics and Business Research (Cebr) detailing how increased digital skills have the potential to benefit individuals, corporations and Government.
- **New features to Waymo autonomous taxis** — Waymo designed new features to improve AV access for passengers with disabilities.



Your Mainstream Wireless Tech News

We hope to learn from each other in the center. If you find any useful or informative news about mainstream wireless tech, please share for future editions.

Send articles, videos, podcasts to:
ask179@pitt.edu

Wireless RERC

Mainstream Tech News August 2022

Tech News (continued):

- **A new app for detecting digital threats** — If you are concerned about privacy and data security in today's connected world, this new app will detect digital threats around you.
- **The Happy Ring** — A new wearable focuses on tracking your mental state.
- **Amazon acquiring iRobot** — Roomba robot vacuum maker iRobot acquired by Amazon for \$1.7 billion.

Follow the Wireless RERC on Social Media



Your Mainstream Wireless Tech News

We hope to learn from each other in the center. If you find any useful or informative news about mainstream wireless tech, please share for future editions.

Send articles, videos, podcasts to:
ask179@pitt.edu



Mainstream Tech News July 2022

Welcome, Wireless RERC team! As part of an innovative team, it is important to be aware of how companies and organizations are improving and integrating Mainstream Wireless Tech.

We encourage you to learn more about any, or all, of the information in this edition. These updates can be helpful for current research or future projects and collaborations.

Podcast Recommendations:

- [Assistive Technology Update \(ATU\) series](#) - A fast-paced weekly update for AT professionals and enthusiasts that keeps you up to date on the latest developments in the field of technology designed to assist people with disabilities and special needs. You may want to review [this recent episode](#) that introduces [RealSam](#) Pocket, a voice operated smartphone for people with visual impairments.

Tech News:

- [Smart Switches or Smart Bulbs? How to Choose the Right Smart Lighting-](#) This article helps distinguish the differences among smart switches, bulbs, plugs, remotes, bridges, and hubs — helping to make smart lighting choices easier.
- [Project Relate from Google, a communication tool for people with speech impairments](#) - Google is working on a new Android app (not available yet) that aims to help people with speech impairments interact more easily with the Google Assistant. For iOS users, an iOS app called [Voiceitt](#) designed for people with speech impairments is available to download in the [app store](#).

Your Mainstream Wireless Tech News

We hope to learn from each other in the center. If you find any useful or informative news about mainstream wireless tech, please share for future editions.

Send articles, videos, podcasts to:
ask179@pitt.edu



Mainstream Tech News July 2022

Tech News (continued):

- [The Smart Audio Report \(pdf\)](#) – This report summarizes the findings from a national online survey of 1190 smart speaker owners, 560 voice-operated assistant users, and 584 non-voice users.
- [The New Google Wallet](#) – Similar to Apple Wallet, the new Google Wallet app is available to all customers that supports payment cards, airplane tickets, government IDs, vaccination proof, and car keys.
- [If you have one of these Thread border routers, your smart home will be Matter-ready](#) - Thread, the main wireless protocol [Matter \(the new smart home standard\)](#), will run on alongside Wi-Fi, recently released an upgrade that removes some current manufacturer-specific barriers. This means any Thread (1.3.0) device could communicate with each other regardless of manufacturers. For example, if you have a Thread (1.3.0) light bulb, it could connect to an Apple HomePod Mini, a Nest Hub (2nd gen) smart display, and an Echo (4th gen) smart speaker (once these hubs are upgraded by the manufacturers with Thread 1.3.0).
- [Alexa Live 2022](#) – Amazon announced a wide variety of features for skill developers and device makers creating the next generation of ambient experience for customers. For example, Amazon will let developers make their own routines and share those with Alexa users, which should offload the burden from users to think of their own routines and then manually create them. Amazon also explained [how Matter \(the new smart home standard\) will make Alexa better](#).

Your Mainstream Wireless Tech News

We hope to learn from each other in the center. If you find any useful or informative news about mainstream wireless tech, please share for future editions.

Send articles, videos, podcasts to:
ask179@pitt.edu



University of
Pittsburgh

School of Health and
Rehabilitation Sciences



Mainstream Tech News

June 2022

Welcome, Wireless RERC team! As part of an innovative team, it is important to be aware of how companies and organizations are improving and integrating Mainstream Wireless Tech.

We encourage you to read any, or all, of the articles we have included in this edition. These articles can be helpful for our current research or future projects and collaborations.

- [Amazon Updates Fire TV Cube to Stream Audio Directly to Hearing Aids](#)
- [Researchers find Amazon uses Alexa voice data to target you with ads](#)
- [Increasing our Focus on Inclusive Technology \[Microsoft Ability Summit\]](#)
- [Microsoft Ability Summit 2022 YouTube videos](#)
- [Google Finally Announces the Pixel Watch](#)
- [Apple announces all-new Home app](#)
- [Connect with Tech \[Tech Owl\]](#)
- [Smarter Homes for Independent Living \[UK Policy Study - PDF attached\]](#)

Your Mainstream Wireless Tech News

We hope to learn from each other in the center. If you find any useful or informative news about mainstream wireless tech, please share for future editions.

Send articles, videos, podcasts to:
[**ask179@pitt.edu**](mailto:ask179@pitt.edu)



University of
Pittsburgh

School of Health and
Rehabilitation Sciences