

Tutorial Program





Lake Miona Regional Rec Center

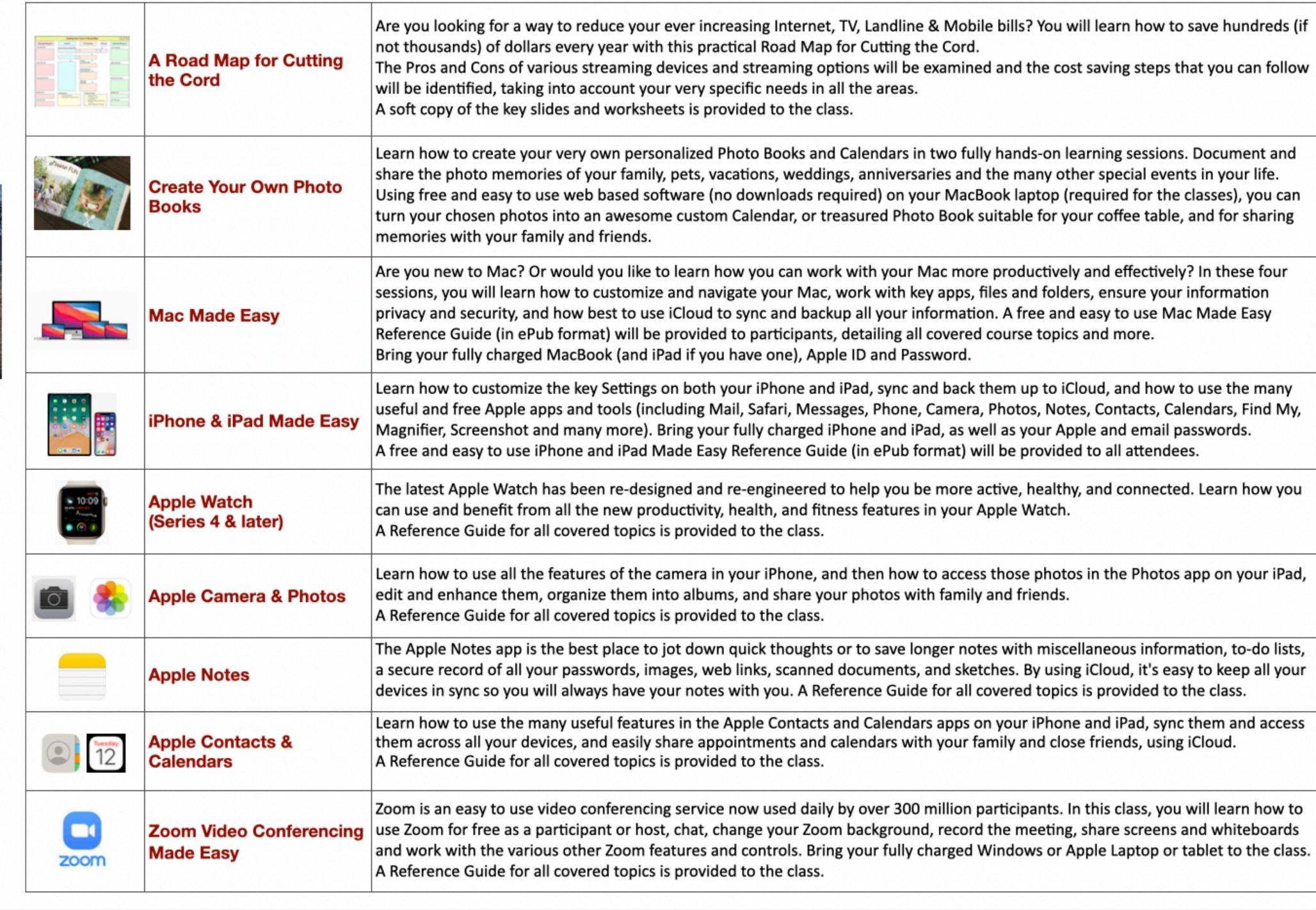
October to May

Tony's NC Apple Club

Held via Zoom every Thursday at 7:30pm from June to September. Free to join. Recordings of the meetings are available on Facebok

June to September

Tony Crawford tonyc4321@gmail.com (352) 321-7845



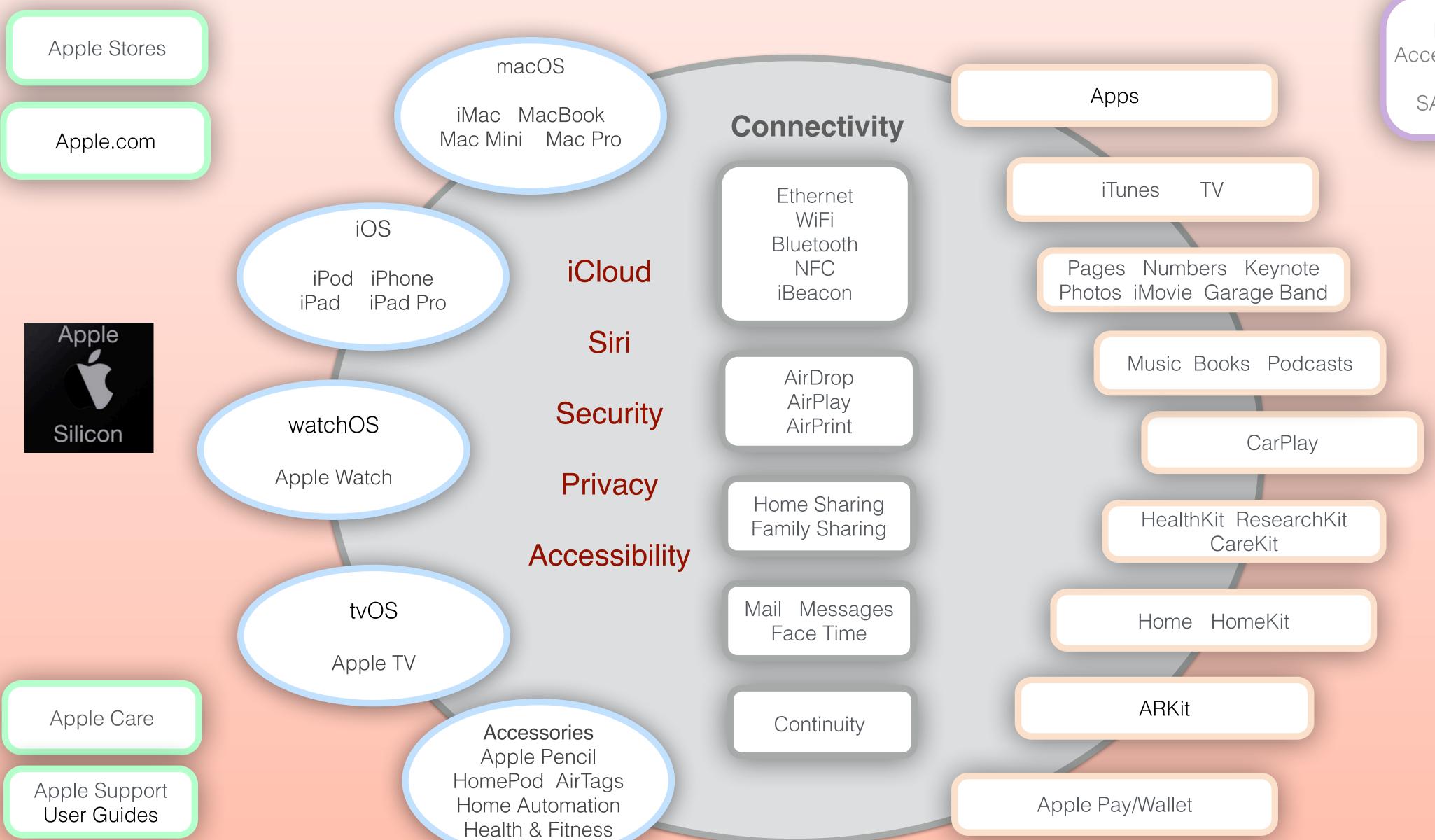


Buying Considerations

Will review at the end

- Should I get this device
- Apple or non-Apple
- Which model do I get (new, older, refurbished)?
- Where do I get it from?
 (Apple retail store, Apple online store, Best Buy, Sams, Mobile Carrier etc)
- Can I trade in my old device?
- When is the best time of year to get it?
 https://buyersguide.macrumors.com
- Should I get a warranty, and if so, from where?

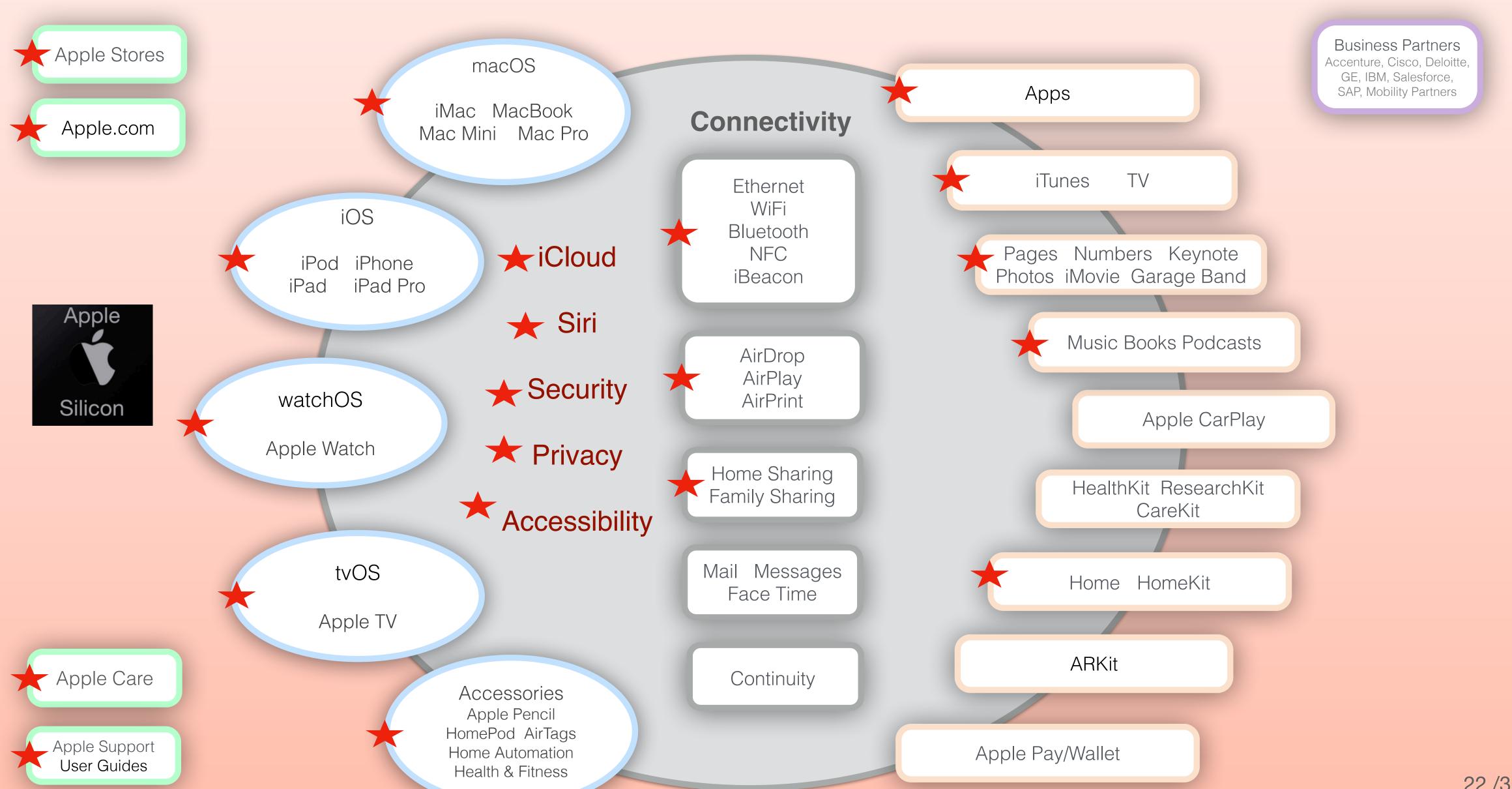
The Apple Ecosystem



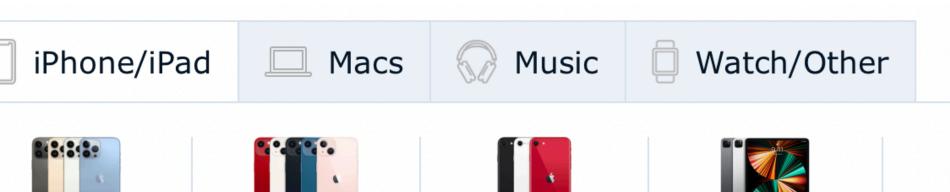
Business Partners

Accenture, Cisco, Deloitte,
IBM, Salesforce,
SAP, Mobility Partners

Apple TV Interactions with The Apple Ecosystem









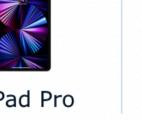








NEUTRAL



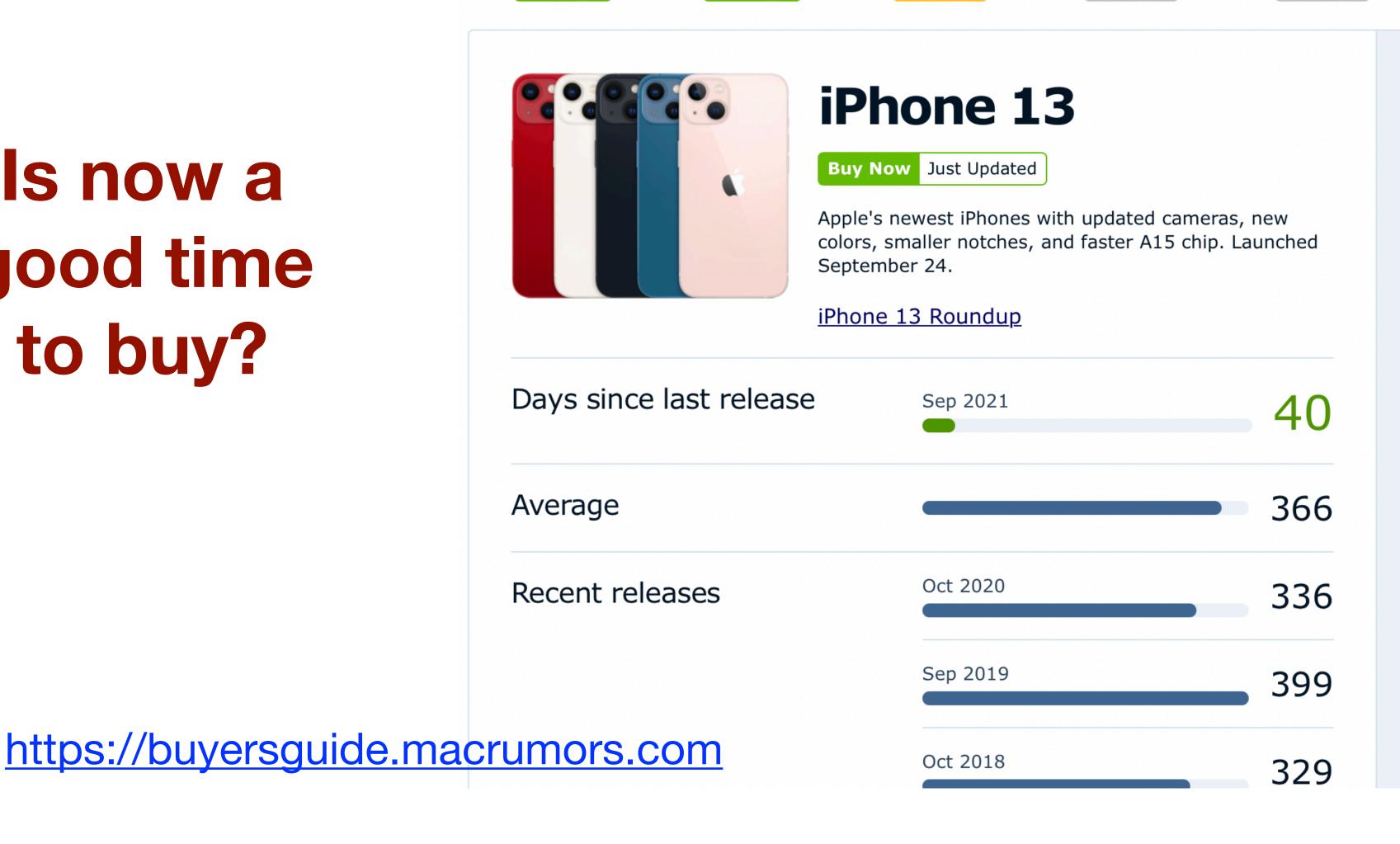


NEUTRAL





Is now a good time to buy?



Related Guides

- iPhone 13 vs. iPhone 12 Buyer's Guide
- iPhone 13 Colors: Deciding on the Right Color
- iPhone 13 vs. iPhone 13 Pro Buyer's Guide
- Best iPhone Deals for October 2021
- iPhone: 2021 Buyer's Guide

Recent Rumors

Oct 13 2021

Apple Suppliers Refute Report Claiming iPhone 13 Production Being Lowered Due to Chip Shortages

Oct 13 2021

China-Based BOE to Supply OLED Panels for iPhone 13 Models

Apple to Cut iPhone Production Goals by as Many as 10 Million Units Due to Chip Shortages

Phone











iPhone

Which iPhone should I Buy?



iPhone 13 Pro Max 6.7" A15



iPhone 13 Pro 6.1" A15



iPhone 13 6.1" A15



iPhone 13 mini 5.4" A15



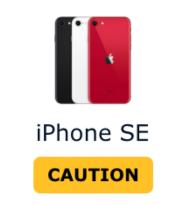
iPhone SE (2nd Gen) 4.7" A13



iPhone 11 6.1" A13



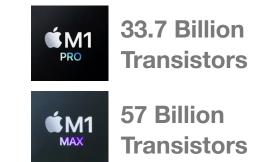




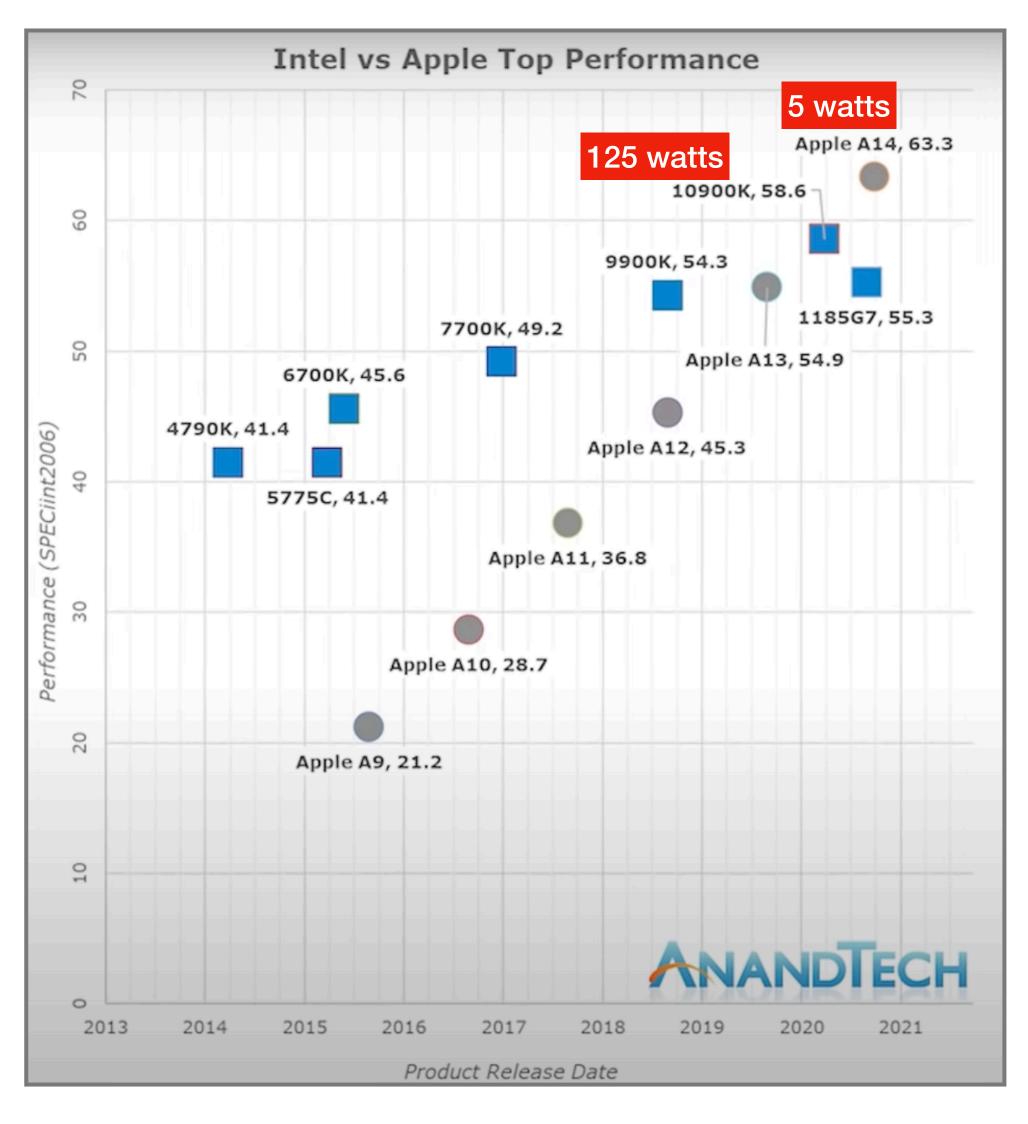
Model	Year Released	Price TBD
13 Pro Max	2021	\$1100 128 GB
13 Pro	2021	\$1000 128 GB
13	2021	\$800 64GB
13 mini	2021	\$700 64GB
SE	2020 (Apr)	\$400 64GB
11	2019	\$500 64GB

iPhone Lifespan and Evolution (2010 - 2021)

	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
	1	2	3	4	5	6	7	8	9	10	11	12
Phone	13 Pro Max 13 Pro 13 13 mini	12 Pro Max 12 Pro 12 12 mini	11 Pro Max 11 Pro 11 SE (April 2020)	XS Max XS XR	X 8Plus 8	7 Plus 7	6s Plus 6s SE	6 Plus 6	5 s	5 5c	4 s	4
	iOS15						7					
		iOS14					6					
			iOS 13				5					
				iOS 12					6			
					iOS 11				5			
						iOS 10				5		
							iOS 9				5	
								iOS 8			4	
									iOS 7			4
Base Storage	128GB	64GB Pro 128GB	64GB	64GB	64GB	32GB	16GB	16GB	16GB	16GB	16GB	16GB
Chip	A15 Bionic	A14 Bionic	A13 Bionic	A12 Bionic	A11 Bionic	A10 Fusion	A9	A8	A7	A6	A5	A4
Transistors	15 Billion	11.8 Billion	8.5 Billion	6.9 Billion	4.3 Billion	3.3 Billion		2 Billion	1 Billion	742 Million		149 Million



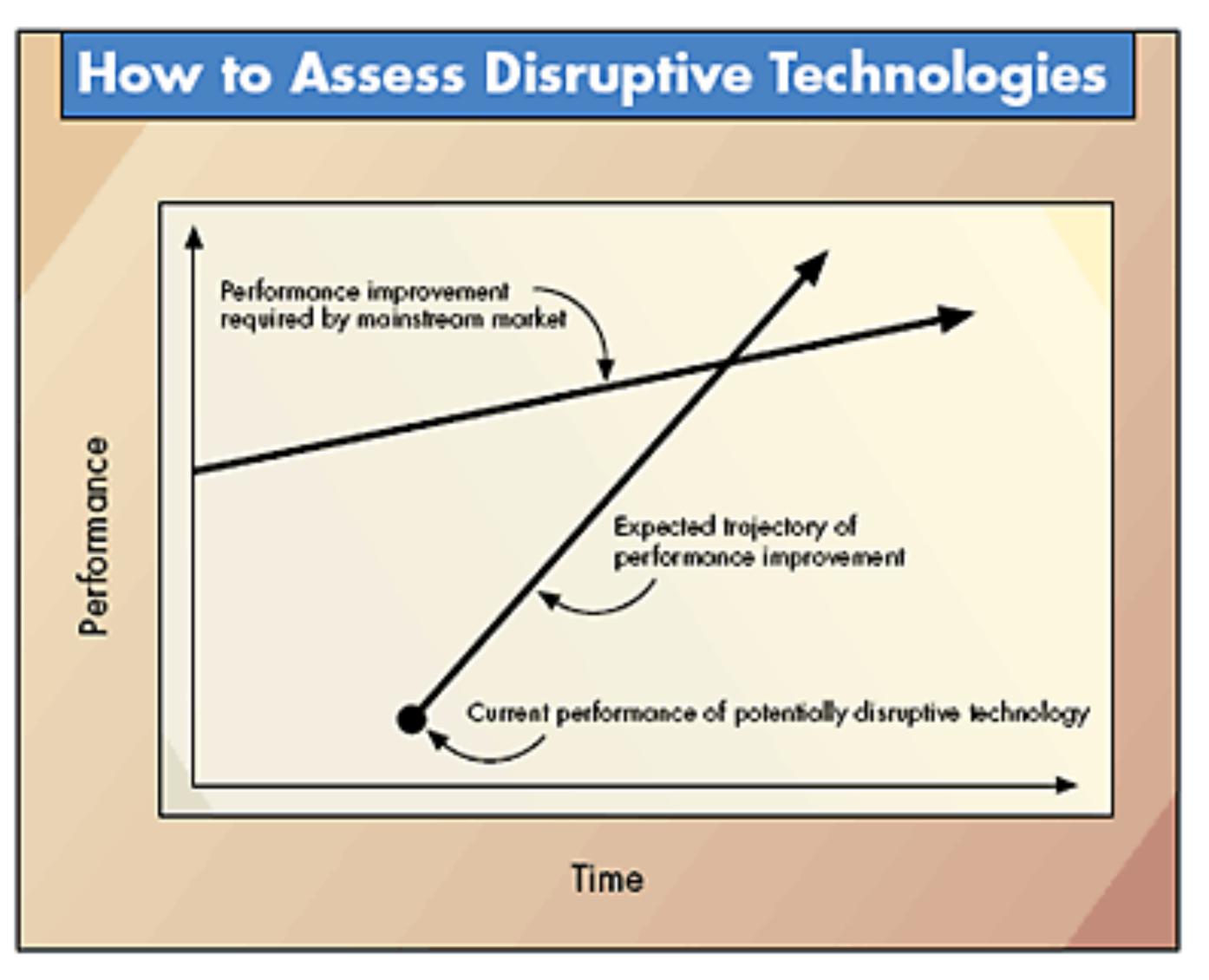




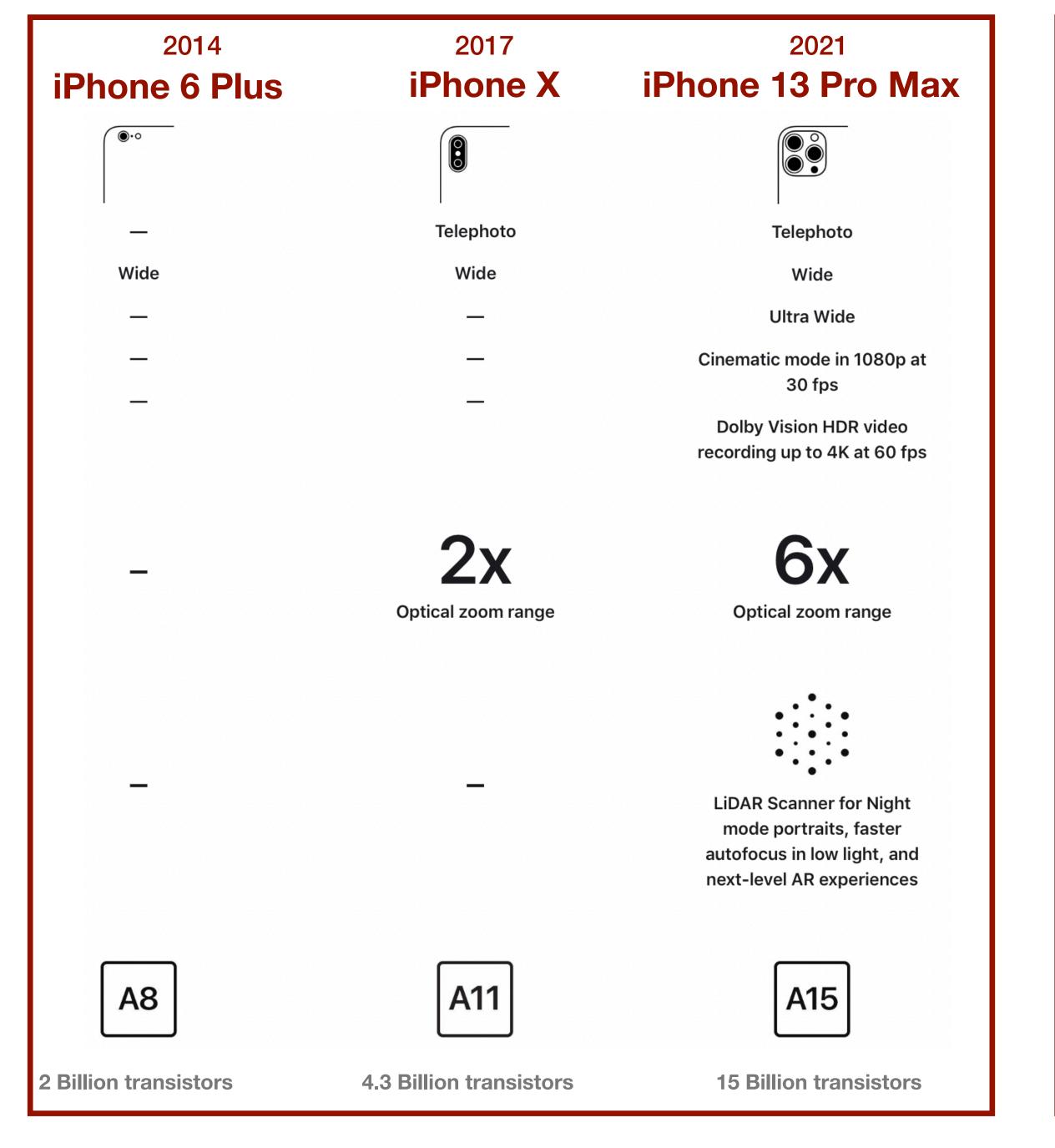
How Apple Just Changed the Entire Industry

Morning Brew

YouTube Nov 23, 2020



<u>Disruptive Technologies: Catching the Wave</u> <u>Joseph Bower & Clayton Christensen</u> <u>Harvard Business Review January/February 1995</u>



2014	2017	2021
iPhone 6 Plus	iPhone X iI	Phone 13 Pro Max
Camera		
Single 8MP Wide camera	Dual 12MP cameras (Telephoto and Wide)	Pro 12MP camera system (Telephoto, Wide, and Ultra Wide)
Wide: <i>f</i> /2.2 aperture	Telephoto: <i>f</i> /2.4 aperture Wide: <i>f</i> /1.8 aperture	Telephoto: $f/2.8$ aperture Wide: $f/1.5$ aperture Ultra Wide: $f/1.8$ aperture
_	_	Night mode
_	_	Deep Fusion
_		Apple ProRAW
Optical image stabilization	Dual optical image stabilization	Sensor-shift optical image stabilization
Digital zoom up to 5x	2x optical zoom in Digital zoom up to 10x	3x optical zoom in, 2x optical zoom out; 6x optical zoom range Digital zoom up to 15x
True Tone flash	True Tone flash with Slow Sync	True Tone flash with Slow Sync
_	_	Night mode portraits
_	Portrait mode	Portrait mode with advanced bokeh and Depth Control
	Portrait Lighting with five effects (Natural, Studio, Contour, Stage, Stag Mono)	Portrait Lighting with six effects ge (Natural, Studio, Contour, Stage, Stage Mono, High-Key Mono)
HDR for photos	Auto HDR for photos	Smart HDR 4 for photos
_	_	Photographic Styles

iPhone

Which iPhone should I Buy?



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iPhone 13 Pro 6.1" A15



iPhone 13 6.1" A15



iPhone 13 mini 5.4" A15



iPhone SE (2nd Gen) 4.7" A13



iPhone 11 6.1" A13







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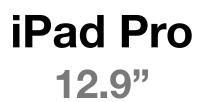


iPad

Which iPad should I Buy?











iPad Pro 11"





10.5"





iPad 10.2"





iPad mini 7.9"











BUY NOW

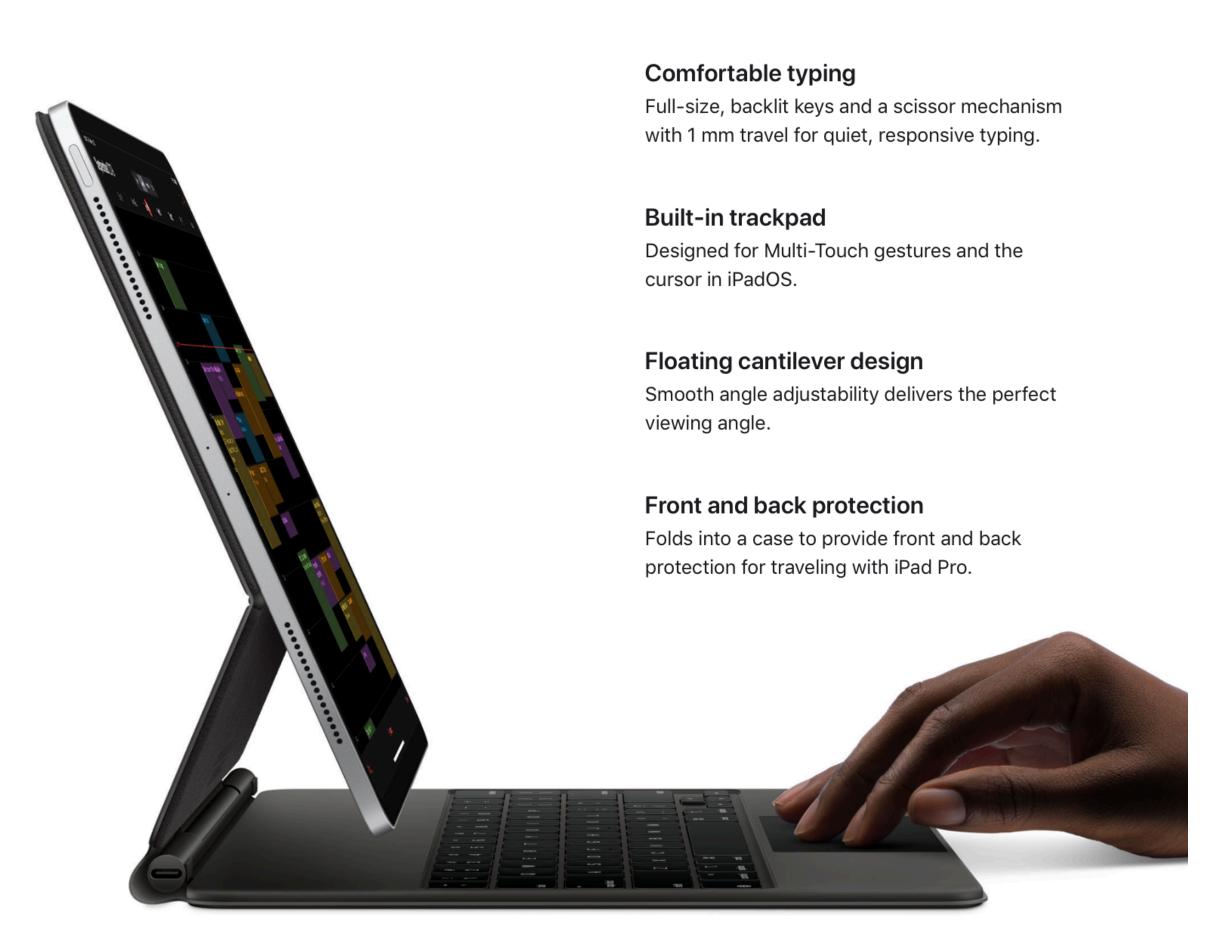
Model	Year Released	Price (Wi-Fi)
iPad Pro 12.9" 5th Gen	2021	\$1,100 M1 128GB
iPad Pro 11" 3rd Gen	2021	\$800 M1 128GB
iPad Air 10.9" 4th Gen	2020	\$600 A14 64GB
iPad 10.2" 9th Gen	2021	\$330 A13 64GB
iPad mini 8.3" 6th Gen	2021	\$500 A15 64GB

Cellular ~ \$130 to \$200 extra + \$15 to \$20 per month

https://www.apple.com/ipad/compare/

Apple Magic Keyboard

\$300 for iPad Air 10.9" (4th Generation) \$300 for iPad Pro 11" (1st, 2nd or 3rd Generation) \$350 for iPad Pro 12.9" (3rd, 4th or 5th Generation)



HT211091 Setup and use Magic Keyboard for iPad

Logitech Combo Touch



- **Do it all with Combo Touch:** Four versatile use modes allow you to type, sketch, view and read without ever having to remove your iPad Pro from the keyboard case
- **Detachable keyboard and adjustable kickstand:** Remove the keyboard when you're done typing for more flexibility and enjoy 50 degrees of adjustable viewing angles
- Large, click-anywhere trackpad: This iPad keyboard case features a responsive and reliable trackpad that allows you to use the entire surface to work and perform Multi-Touch trackpad gestures
- Backlit, laptop-like keyboard: Backlit keys auto-adjust to your environment with 16 levels of brightness and a full row of iPadOS shortcut keys provide one-tap access to volume controls and more
- Front, back and corner protection: A durable form-fit cover protects the front, back, and corners of your iPad Pro, securely holding it in place no matter what you're doing
- **SMART CONNECTOR technology:** Enjoy instant power and pairing with Combo Touch keyboard case and never worry about charging as power is sourced directly from your iPad Pro
- Home for Apple Pencil: Easily charge your Apple Pencil while keeping the case on thanks to a convenient opening in the side of the iPad Pro case

Apple Music Voice Plan



Music Voice Plan

\$4.99 per month



3 month free trial

Coming Soon

Voice Plan \$4.99/month

1 person
Siri on Apple devices
Songs, playlists, stations
All Apple devices

Individual Plan \$9.99/month

1 person

Siri on Apple devices

Songs, playlists, stations, lyrics, music videos

Spatial and lossless audio

Apple + supported devices

Family Plan

\$14.99/month

Up to 6 people

Siri on Apple devices

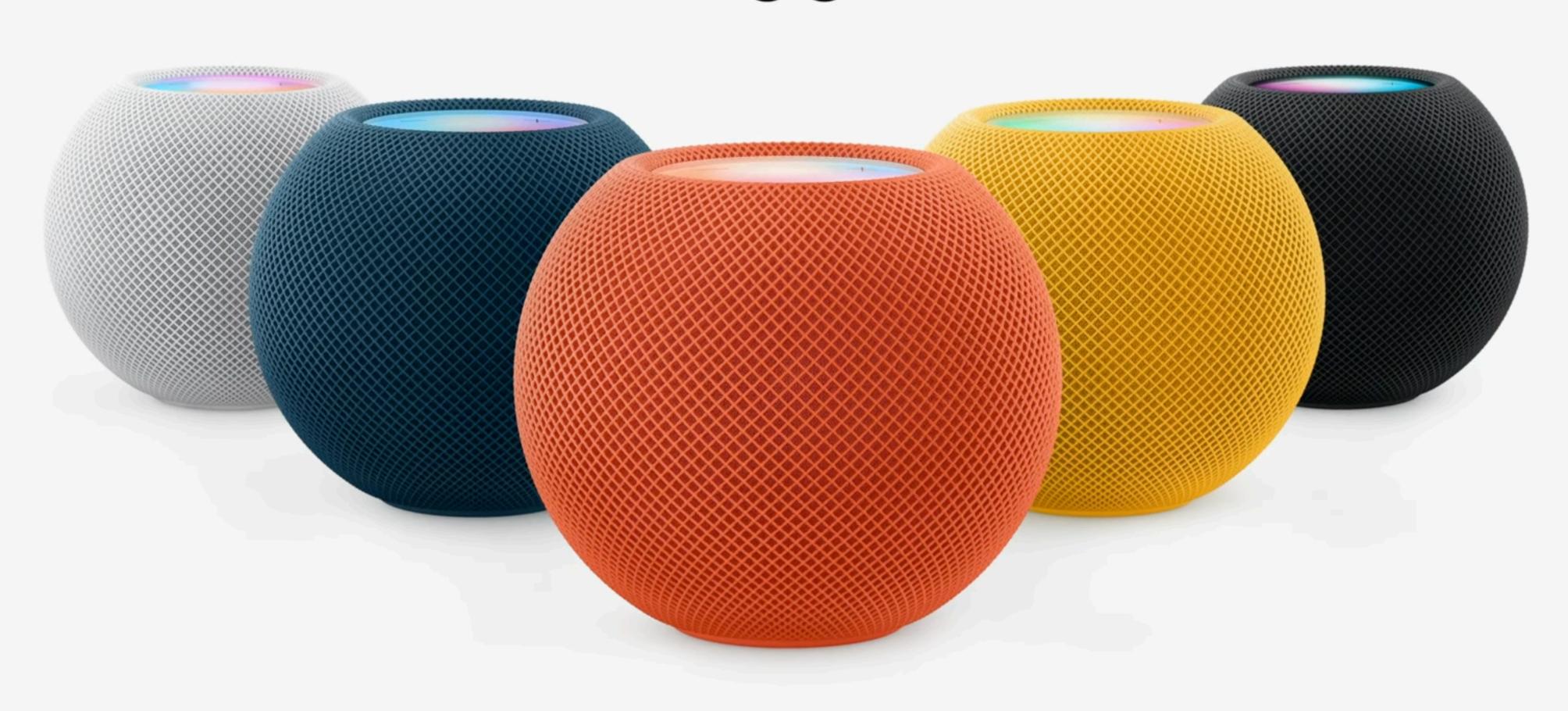
Songs, playlists, stations, lyrics, music videos

Spatial and lossless audio

Apple + supported devices

Home Pod Mini

HomePod mini \$99





AirPods

All-new design

Sweat and water resistant





New Apple custom driver

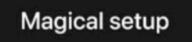






























AirPods 2nd Generation

\$129



AirPods
3rd Generation

\$179



AirPods Pro

\$249



AirPods Max

\$549

Macs

Which Mac is right for you?





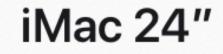












From \$1299



Learn more >

iMac 27"

From \$1799



Learn more >

Mac Pro

From \$5999



Learn more >

Mac mini

From \$699



Learn more >



Apple M1 chip



Up to Intel Core i9



Intel Xeon W processor



Apple M1 chip Also available with Intel Core i5 or i7 processor

iMac 24"

April 2021

At a Glance

24"

4.5K Retina display

Actual diagonal screen size is 23.5 in.



Apple M1 chip

8-core CPU and up to 8-core GPU.



Up to 16GB unified memory

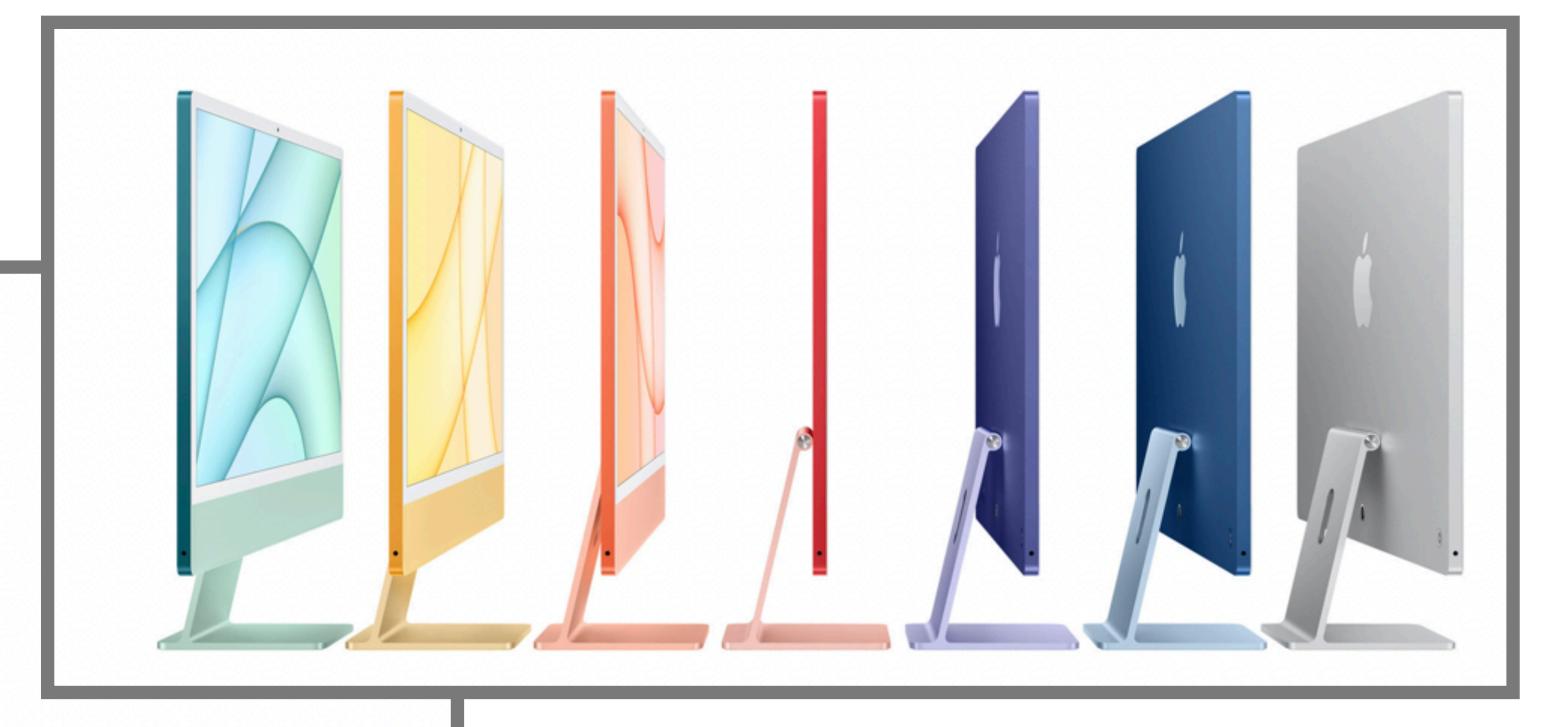


1080p FaceTime HD camera with M1 ISP



Magic Keyboard with Touch ID¹

2TB
storage²



Price

\$1299

\$1499 (256GB SSD model) \$1699 (512GB SSD model) Apple Event — November 10

Up to

16GB

memory

Up to

2TB

SSD



Supports 6K external display

macOS Big Sur

Cool and quiet operation



Up to

faster machine learning



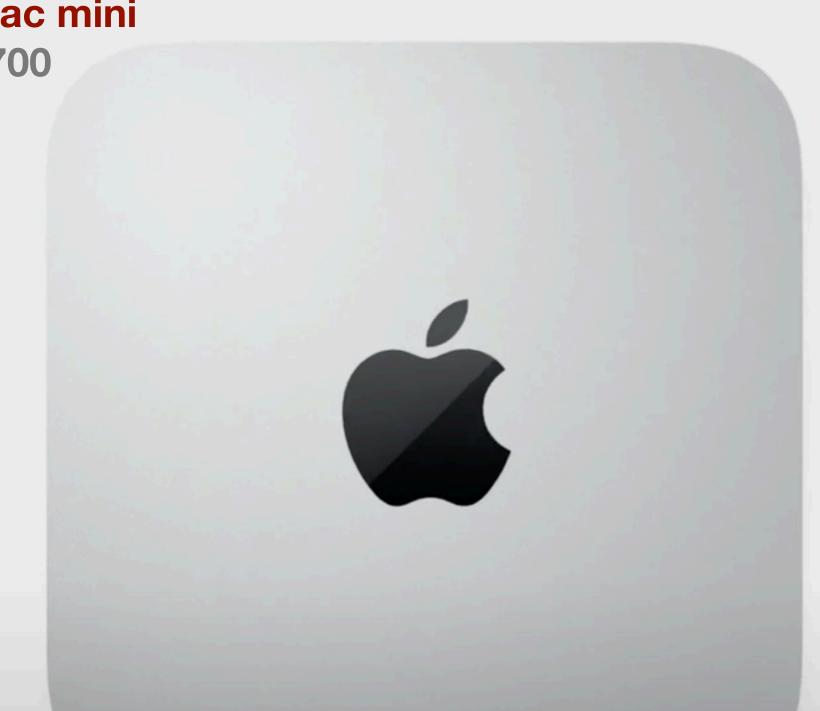


Thunderbolt / USB 4

Up to 60% more energy efficient



\$700





HDMI

Wi-Fi 6



Gigabit Ethernet



iPhone and iPad apps



Up to

faster CPU

Up to



Secure **Enclave**



faster graphics

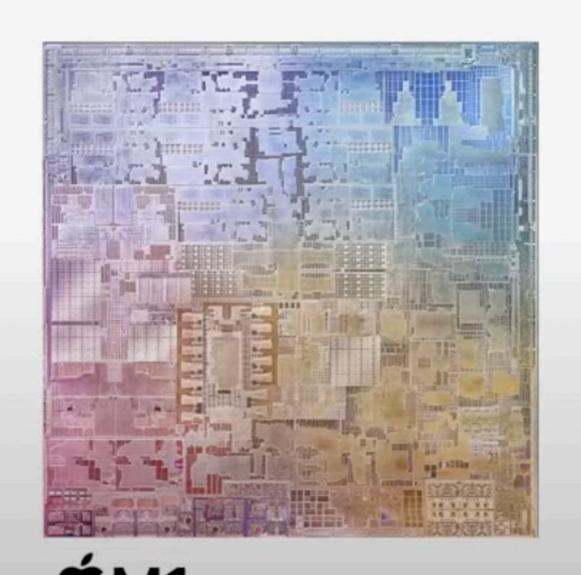






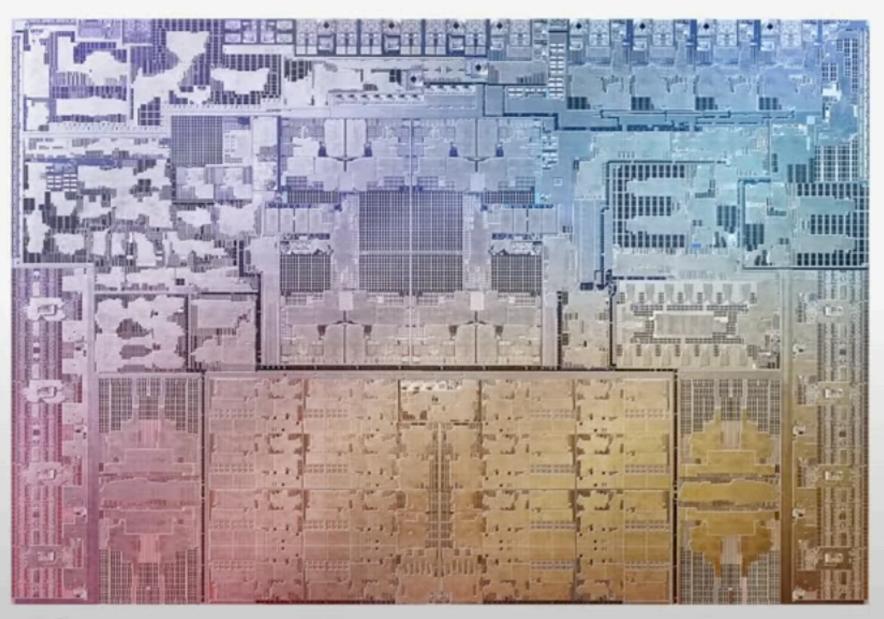
MacBooks

Apple Silicon



16 Billion Transistors

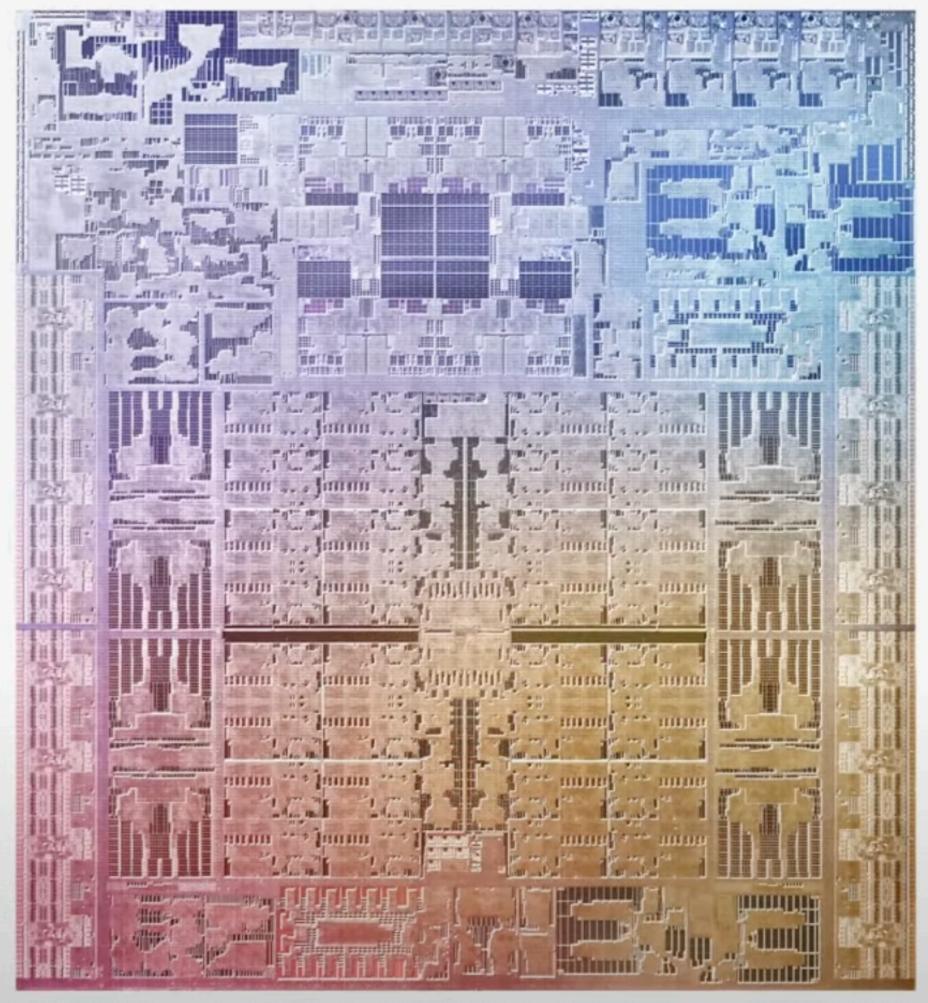
New



≰M1 Pro

33.7 Billion Transistors





≰M1 Max

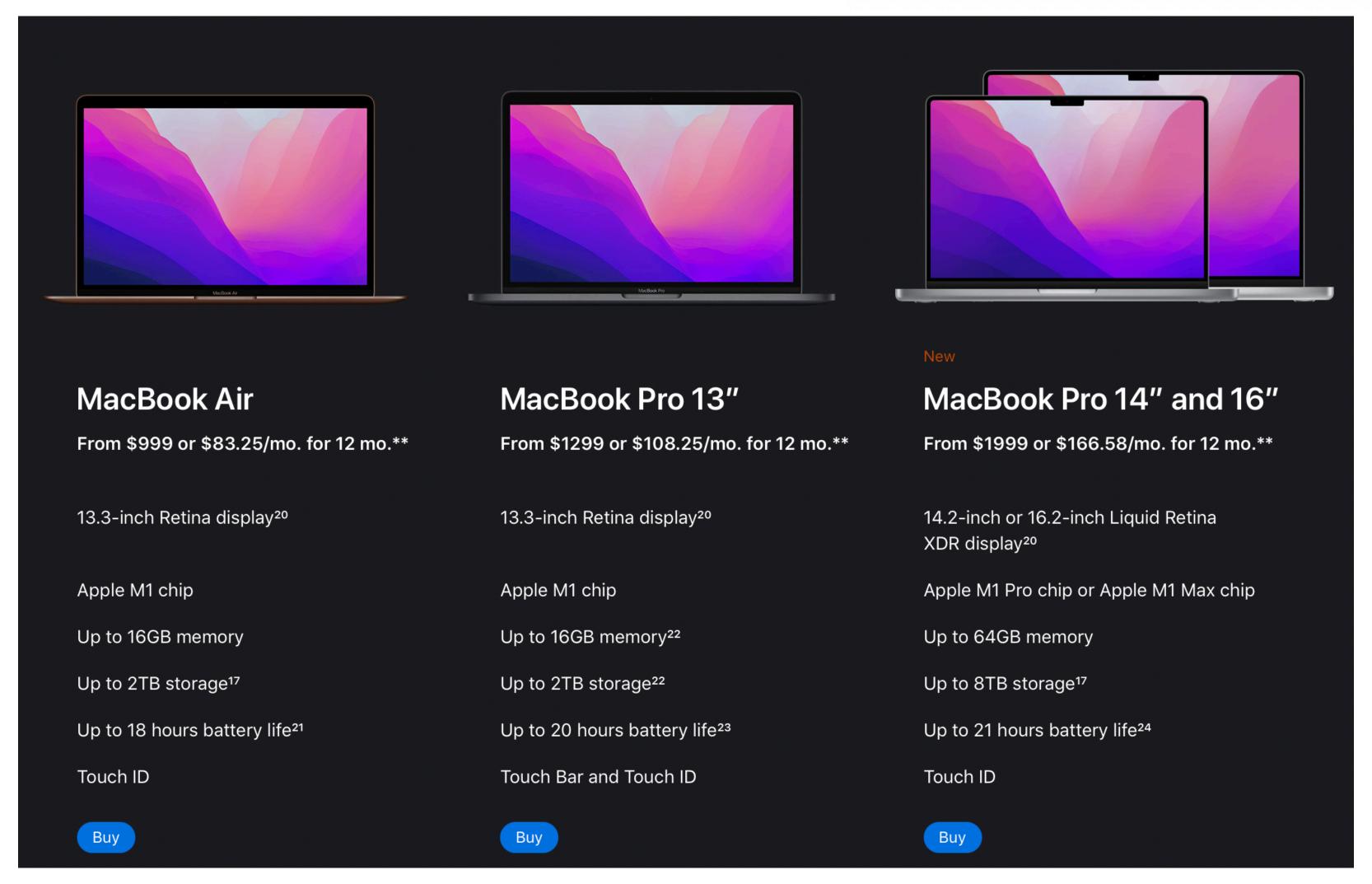
51 Billion Transistors

Which MacBook is right for you?









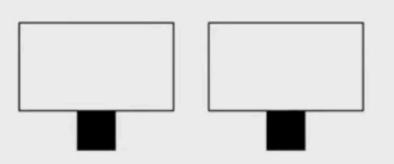




Thunderbolt 4



Secure Enclave



Support for two external displays



33.7 billion

Transistors

16-core

Veurai

11 trillion operations per second



Up to 10-core **CPU**



GPU

Industry-leading performance per watt 5 nm process

40000 Memory bandwidth

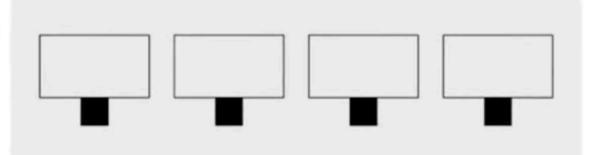




Thunderbolt 4







Support for four external displays

Up to 64GB **Unified memory**

57 billion

Transistors

16-core

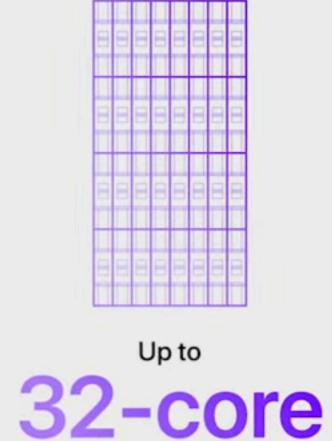
Neura

11 trillion operations per second





10-core **CPU**



GPU

Industry-leading performance per watt

5 nm process

40000

Memory bandwidth

ACTOUTY PYO beryllium ER



More than 110 suppliers committed to 100% renewable energy for Apple



100% carbon neutral products by



RESPONSIBLY MANAGED A T FORESTS

100% virgin wood fiber from









display glass

free of arsenic



Recycled plastic used in multiple components, including speakers



90% or more fiber-based packaging

Up to 21 hours) battery life

Up to

faster storage

Up to

11x

faster ML



Two display sizes

Drives over 75 million pixels

\$M1 **PRO**



Six-speaker

sound system

with spatial audio

Up to

13x

faster graphics

MacBook Pro

14" \$1999

Advanced thermal architecture

Up to

storage

Up to **64GB**

memory



1080p FaceTime

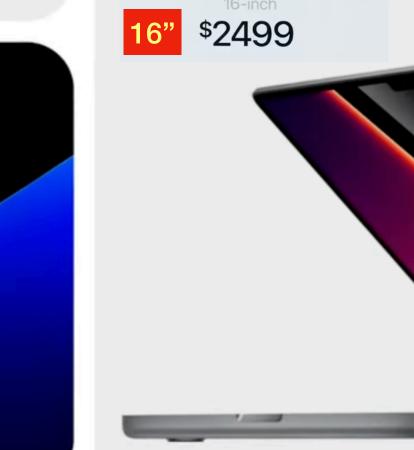
HD camera

macOS Monterey



Studioquality mics





Up to

3.7x

faster CPU

MacBook Pro

Magic Keyboard

Apple Trade In

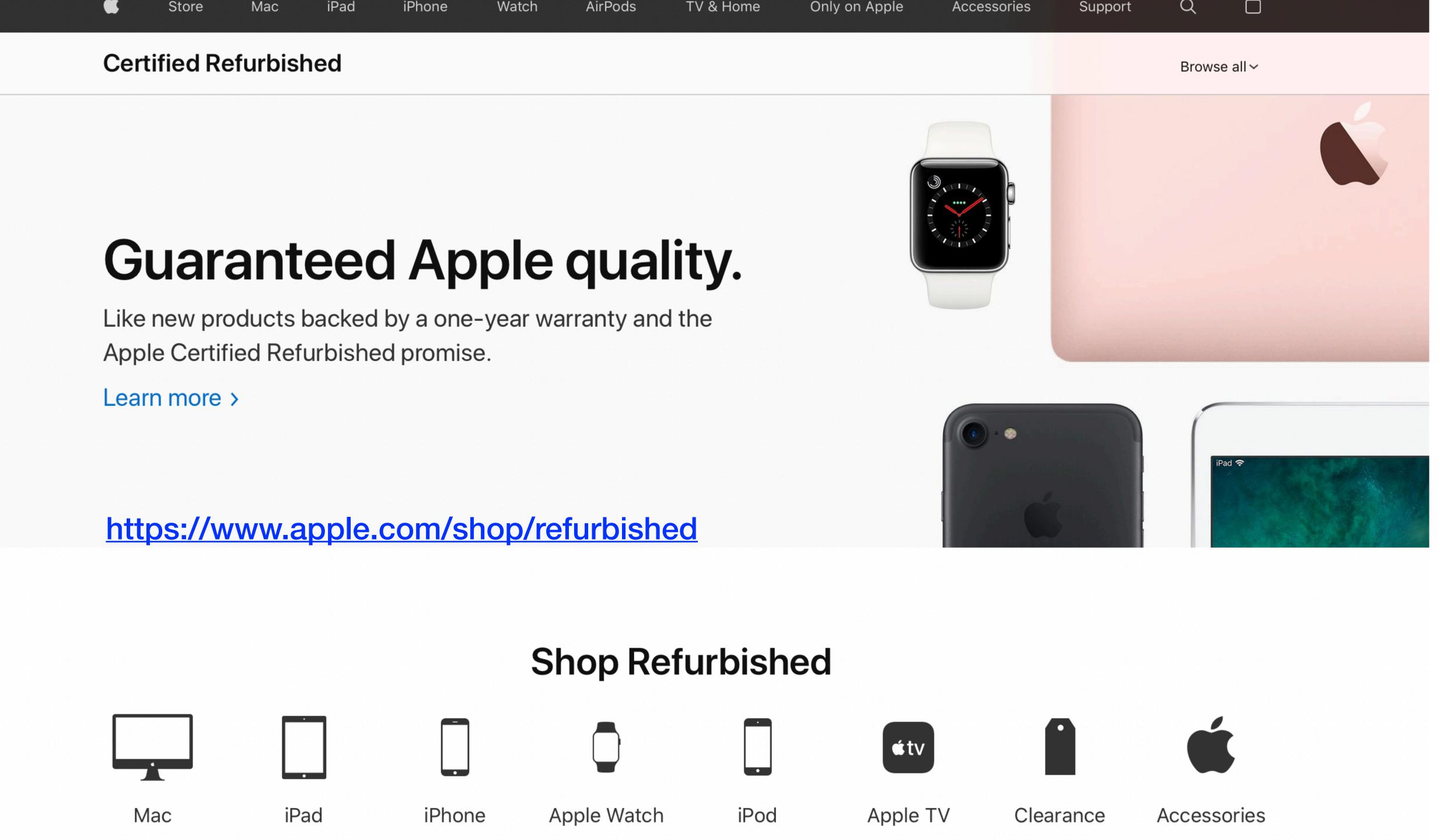
Turn the device you have into the one you want.

It's easy to trade in your eligible device for credit toward your next purchase, or get an Apple Gift Card you can use anytime. If your device isn't eligible for credit, we'll recycle it for free. No matter the model or condition, we can turn it into something good for you and good for the planet.



https://www.apple.com/shop/trade-in

					•tv
iPhone	iPad	Mac	Apple Watch	Android	Other Device
Your device		Estimated trade-in value*	Your device		Estimated trade-in va
Phone 12 Pro Max		Up to \$790	iPad Pro		Up to \$
Phone 12 Pro		Up to \$640	iPad		Up to \$
Phone 12		Up to \$530	iPad Air		Up to \$
Phone 12 mini		Up to \$400	iPad mini		Up to \$
Phone SE (2nd generation)		Up to \$170	Your device		Estimated trade-in val
Phone 11 Pro Max		Up to \$500	MacBook Pro	0	Up to \$16
Phone 11 Pro		Up to \$450	MacBook Air		Up to \$5
iPhone 11		Up to \$340	MacBook		Up to \$3
iPhone XS Max		Up to \$320	iMac Pro		Up to \$29
			iMac		Up to \$14
Phone XS		Up to \$240	Mac Pro		Up to \$32
iPhone XR		Up to \$230	Mac mini		Up to \$9
iPhone X		Up to \$200	Your device		Estimated trade-in value
Phone 8 Plus		Up to \$180	Apple Watch	Series 6	Up to \$27
Phone 8		Up to \$110	Apple Watch	SE	Up to \$15
Phone 7 Plus		Up to \$110	Apple Watch	Series 5	Up to \$14
Phone 7		Up to \$50	Apple Watch	Series 4	Up to \$10
Phone 6s Plus		Up to \$60	Apple Watch	Series 3	Up to \$7
Phone 6s		Up to \$30	Apple Watch	Series 2	Up to \$2



Mactracker

Reference

Available free on the Mac, iPad and iPhone App Stores

OPEN

381 RATINGS 4.8

4+ Years Old

AGE

CHART #9 Reference

DEVELOPER lan Page

LANGUAGE EN English

SIZE 165.7

MB

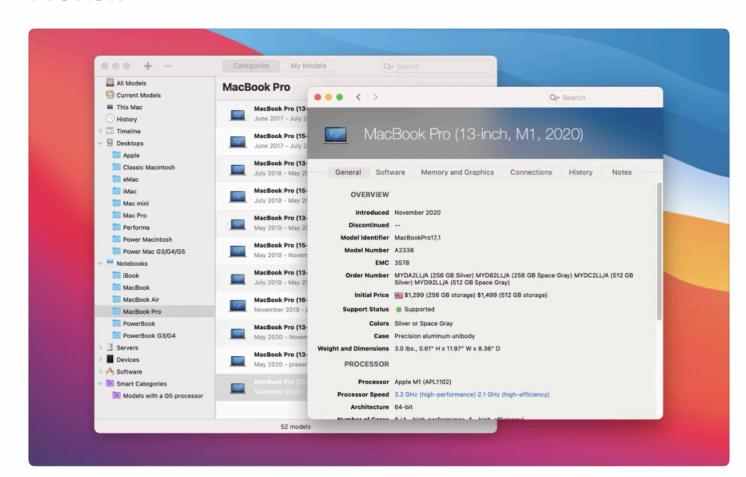
What's New

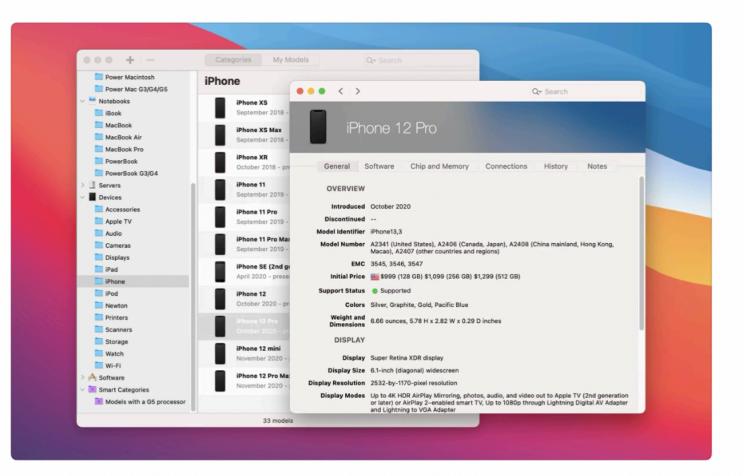
- Adds details on latest OS releases
- Other minor changes and additions

Version History

3mo ago Version 7.10.7

Preview





☐ Mac

Mactracker provides detailed information on every Apple Macintosh, iPod, iPhone, and iPad ever made, including items such as processor speed, memory, graphic cards, supported OS versions, price, storage, and expansion options. Also included is information on early Apple systems, Newton, Apple TV, Apple Watch, Apple accessories, audio, displays, printers, scanners, storage, Wi-Fi products, and operating systems.

Ian Page

Website 🕖

Support ?

Ratings & Reviews



See All

Buying Considerations

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- Apple or non-Apple
- Which model do I get (new, older, refurbished)?
- Where do I get it from?
 (Apple retail store, Apple online store, Best Buy, Sams, Mobile Carrier etc)
- Can I trade in my old device?
- When is the best time of year to get it?
 https://buyersguide.macrumors.com
- Should I get a warranty, and if so, from where?