# **Buying & Using Older PCs**

#### Be an Informed Consumer

#### Getting the Most Out of an Older PC

## What Type of PC Do You Want/Need?

- Desktop/Tower
  - Larger
  - Upgrades are easier & more common
  - Cheaper for same capability
  - Build your own
- Laptops/Notebooks
  - Portable
  - Upgrades are harder or not possible
  - More expensive for same capability
  - Newer Always Better (Battery & CPU Efficiency)

### How Old Is This PC?

- Look at System Specs in Windows or System BIOS
- Learn Intel Processor Models
  - Celeron & Pentium are lower end parts (but still good enough in most cases)
  - Core 2 Duo/Quad Introduced 2006 Obsolete
  - Core i3/i5/i7 Current Naming Convention
    - 1<sup>st</sup> Generation Introduced 2008
    - 10th Generation Introduced 2019
  - Laptop Model Numbers Are Even More Confusing
- Use Intel Ark to search for processor model number (Look For Launch Date)
- Avoid AMD CPUs unless new Ryzen 3<sup>rd</sup> generation models
- RAM & Hard Drives are cheaply upgraded, BUY A GOOD CPU
- New PCs aren't as expensive as you may think

#### Upgrade Hardware

- Add RAM
  - Helps Windows run better
  - 4GB Minimum for Windows 10
- New Hard Drive More Storage, Better Reliability
- Switch to Solid State Drive (SSD)
  - Biggest and most noticeable speed upgrade
  - Use small capacity (120GB) for boot drive (under \$30)
  - Get large drive for whole system
  - Cheaper every day (1TB = \$100)

### **Upgrade Windows**

- Windows End Of Life (No Security Updates!)
  - Windows XP (2001) April 8, 2014
  - Windows Vista (2006) April 11, 2017
  - Windows 7 (2009) January 14, 2020
  - Windows 8 (2012) January 12, 2016
  - Windows 8.1 (2013) January 10, 2023
  - Windows 10 (2015)
- Have Windows 10?
  - System Reset
  - Clean Install

## PC Too Slow For Windows Upgrade?

- Air Gap (Don't Connect To Internet
- Newer software may not run on old versions of Windows
- Try Linux
  - Free
  - Try without installing (Live CD or Bootable USB Flash Drive)
  - Multiple flavors (distributions) to try
  - Some distributions look a lot like windows
  - Older hardware is well supported
  - Lots of popular Ham Radio software available (FLDIGI, WSJT-X)