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Macintosh 128, Plus, SE and Macintosh II: RFI Emissions (10/94)

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TOPIC -----

This article provides RFI emission information for some Apple products.

DISCUSSION -----

The conductive emissions tests Apple has run on the Macintosh family include testing up to 600 MHz. Beyond that point, the emissions are not significant for FCC standards and all emissions levels fall within FCC regulations.

Each member of the Macintosh family has a switching power supply with emissions in the range 100 to 140 KHz.

Macintosh II

Because the Macintosh II has three clocks, there are three emission sources:

- The first is the system clock, at 31.33 MHz. Harmonics of that clock will be seen up to the 600 MHz limits of Apple testing.
- The second clock, with a base of 40 MHz, is used for NuBus communications. Since it is internally divided by 4 to provide the 10 MHz NuBus synchronous signal, the harmonics seen from this clock will be at 10 MHz intervals and are significant up to 600 MHz.
- The third source of RFI is the Macintosh II Video Card. Its clock runs at 30.24 MHz and will provide harmonics emissions up to Apple's 600 MHz limit.

Other Macintosh Models

The Macintosh 128K, Macintosh 512K, Macintosh Plus, and Macintosh SE have emissions that are harmonics of the system clock, which runs at 15.75 MHz. These Macintoshes have emissions that are multiples of 15.75 MHz, ranging as high as 500 MHz.

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