

# Universal Dock Adapters & Adapter Components

## R13

October 21, 2010

Adapter No.	iPod Description	Capacity	Apple Drawing No. (.PDF & .STP)	Assembly drawing	Numbered "Plug" (.PDF & .STP)
1	3G iPod	10GB, 15GB, 20GB	603-7568	815-8467	815-8494
2	3G iPod	30GB & 40GB	603-7569	815-8468	815-8495
3	iPod mini	4GB & 6GB	603-7564	815-8460	815-8487
4	4G iPod & U2 iPod	20GB	603-7563	815-8463	815-8490
5	4G iPod	40GB	603-7562	815-8464	815-8491
6	iPod photo & Color U2 iPod	20GB & 30GB	603-7560	815-8465	815-8492
6	iPod with color display	20GB	603-7560	815-8465	815-8492
7	iPod photo	40GB & 60GB	603-7559	815-8466	815-8493
7	iPod with color display	60GB	603-7559	815-8466	815-8493
8	iPod nano	2GB & 4GB	603-7565-A	815-8459-07	815-8486-07
9	5G iPod (with video)	30GB	603-7566-A	815-8461-A	815-8488-A
9	U2 iPod with video	30GB	603-7566-A	815-8461-A	815-8488-A
9	iPod classic	80GB, 120GB	603-7566-A	815-8461-A	815-8488-A
10	5G iPod with video	60GB & 80GB	603-7567-A	815-8462-A	815-8489-A
10	iPod classic	160GB	603-7567-A	815-8462-A	815-8489-A
11	iPod nano (2 <sup>nd</sup> generation)	2GB, 4GB, 8GB	603-9239-A	815-8973-A	815-8972-A
12	iPhone	4G, 8GB, 16GB	607-0311-A	815-9220-A	815-9219-A
13	iPod nano (3 <sup>rd</sup> generation)	4GB, 8GB & 16GB	607-1419-A	815-9639-A	815-9641-A
14	iPod touch	8GB & 16GB	607-1418-A	815-9638-A	815-9640-A
15	iPhone 3G	8GB & 16GB	818-0068-02 & 818-0068	613-7374-01	818-0069-01 & 818-0069
15	iPhone 3GS	16GB & 32GB	818-0068-02 & 818-0068	613-7374-01	818-0069-01 & 818-0069
16	iPod touch 2G	8GB, 16GB & 32GB	613-7432-A	818-0157-C	818-0158-A
16	iPod touch 3G	16GB, 32GB, & 64GB	613-7432-A	818-0157-C	818-0158-A
17	iPod nano (4 <sup>th</sup> generation)	8GB & 16GB	613-7431-A	818-0155-A	818-0156-A
18	iPod nano (5 <sup>th</sup> generation)	8GB & 16GB	613-8007-A	818-0894-B	818-0895-A
19	iPhone 4	16GB & 32GB	613-8764-A	818-1401-B	818-1409-A
20	iPod touch 4G	8G, 32GB & 64GB	613-8732	See note 1	See note 1
-	iPod nano (6 <sup>th</sup> generation)	all	See note 2	n/a	n/a

Note 1: Beginning with the iPod touch 4G, the assembly & number plug drawings are no longer provided for dock adapters. Refer to prior assembly drawings for details on assembling a numbered plug into a dock adapter, and modify a numbered plug .stp file (e.g., 818-1409-A.stp) so that it indicates the appropriate adapter number. If a number is used on the plug or dock adapter itself, the number used must match the adapter numbers indicated in this document.

Note 2: A universal dock adapter is not used with the iPod nano (6<sup>th</sup> generation); Apple does not provide .stp or .pdf files for an iPod nano (6<sup>th</sup> generation) adapter.

### Testing Universal Docks & Universal Dock Adapters

It is mandatory that licensees do "test fits" of their adapters into an Apple branded product that has a universal dock well, and that licensees also test fit Apple's adapters into the licensee's universal dock well. Apple's adapters and the licensees' adapters should fit snugly into the licensee's dock 'well', and must not require more than a slight amount of force to snap the adapter(s) into the licensee's dock 'well'.

The user must also be able to remove Apple adapters and licensee adapters from both the Apple & licensee docks without the need for additional tools or excessive force. Use Apple's adapters in an Apple' branded dock for an example of how they should fit into the licensee's universal well & snap into place.

### **Naming Conventions**

While you may see various names for the adapters used in these drawings, you must refer to the Universal Dock in a specific way in marketing materials & packaging. The name "iPod Universal Dock" refers specifically to the stand-alone product from Apple. Third parties should refer to the Universal Dock in their products as follows:

Product name: The phrase "with Universal Dock for iPod" must be added after the company name and product name—for example, the "NASA Space Shuttle with Universal Dock for iPod." Do not say the "NASA Universal Dock," the "Space Shuttle Dock for iPod," or the "NASA Space Shuttle with iPod Universal Dock."

Bullet point: Similarly, a short copy block or bullet point on a package or website must read "Integrated Universal Dock for iPod," or "Built-in Universal Dock for iPod." Not "iPod compatible," "iPod-ready," "Ready for iPod," "contains iPod Universal Dock," or anything to that effect.

### **3<sup>rd</sup> Party Vendor Logo on Adapters**

If you are tooling your own Universal Dock Adapters, Apple requires that the adapter have your vendor logo on the adapter itself. While silk screening or printing is acceptable, a sticker is not recommended. See the file "3<sup>rd</sup> Party Vendor Logo.pdf" for details.

### **Universal Dock Adapter Latch**

Apple requires a "latch" mechanism to hold the adapter in place in the well of a universal dock. Apple's solution is to use a plastic part, which, given the nature of its design, pushes a small tab with a specific spring force against the adapter's number plug. A drawing of this latch is contained in the 815-8497.pdf file. CAD/CAM information can be found in the 815-8497.stp file.

### **Connector Sleeve**

The use of a 'connector sleeve' is mandatory in products that implement a universal dock. Please do not modify the design of a universal dock adapter so that an adapter is not necessary, as a modified (and non-standard) adapter will not work in Apple products that include a 'connector sleeve'.

By design, the connector opening in the bottom of a universal dock well is larger than the connector itself. To fill the space between the opening in the dock well and the connector, a connector sleeve is placed over the connector, and rests on the base of the connector itself. This helps align the connector to the opening in the dock well, and provides an aesthetically view of the dock, so that the user cannot see the inside of the dock (under the universal dock well). The design of this connector sleeve is detailed in the 815-8471-13.pdf and the 815-8471-13.stp (CAD/CAM) files.

If you have questions about acquiring the connector sleeve, please contact the MFi licensing department by sending an email to ([MadeforiPod@apple.com](mailto:MadeforiPod@apple.com))

### **Connector for use with Universal Dock**

The correct connector to use with the universal dock is the "514S0117 - 30 Pin I/O plug, with tab" part. The 514S0043 or 514S0098 connectors are deprecated, and they must not be used without special permission from the MFi licensing department.

The 514S0117 connector has several important design differences from the 514S0043 & 514S0098 connectors:

- It is slightly taller than 514s0043 (this is necessary when using the universal dock/well)
- It is designed to accept the universal dock plug connector sleeve.
- It adds a support tab (not present in the 514s0098) for added connector stability.

## Revision History

Date	Revision	Comments
2010-10-21	R13	Added iPod touch 4G adapter information. Added note that beginning with the iPod touch 4G, dock adapter assembly drawings and numbered plug .stp & .pdf files will not be provided.
2010-07-13	R12	Added iPhone 4 adapter information. Changed name of document & zip archive from "iPod Universal Dock" to "MFi Universal Dock". Changed name of iPod touch (Fall 2009) to iPod touch 3G, to match the naming convention now used by Apple customer support. Added iPhone adapter details.
2010-01-15	R11	Added iPod touch (Fall 2009) adapter information. Removed comment regarding iPod nano & iPod touch .STP files; these files were updated with the R8 release of the iPod Universal Dock ZIP archive file, and the comment no longer applies.