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# Self-Certification Test Form

Product name: test firefox

Product Plan Id: 106601-0034  
Model/SKU: T200

## 1. Instructions

Please complete all tests and all sections of this Self-Certification Test form ("Test Form") that apply to the Proposed Product. Check the applicable buttons (Pass, Fail and NA) for each test when you have run the tests required to certify the proposed product. You must test each of the Apple products specified within the Product Plan and listed on this form as being applicable. Each Apple product tested must have the most recent version of the iPod, iPad or iPhone software. Capitalized terms not defined herein have the meanings set forth in the MFi License Agreement. The checklists in this test form are not meant as an exclusive list of legal and regulatory requirements. Licensee is solely responsible for compliance with all applicable laws and regulations. For any questions regarding this test form, please contact [ipodselfcert@apple.com](mailto:ipodselfcert@apple.com) Please do not submit any self-certification materials until you have received Product Plan approval for the product.

## 2. Compatibility

You are required to test each iPod, iPad and iPhone model that you will be claiming compatibility with. Each model tested must have the latest version of the iPod, iPad or iPhone software installed. The installed software version must be listed in the provided area below.

### 2.1. Locating the software version on the iPod, iPad and iPhone touch:

1. Press the Home button then select the Settings icon.
2. Scroll to and then select General.
3. Scroll to and then select About.
4. Information about your iPhone appears. You should see a line item labeled Version. The number to the right is the software version.

### 2.2. Locating the software version on the iPod:

1. On all iPod models (except iPod shuffle) press the Menu button repeatedly until you see the Main menu.
2. Scroll to and then select Settings.
3. Scroll to and then select About.
4. Information about your iPod appears. Repeatedly press the select button until you see a line item labeled Version. You will see the software version installed on your iPod listed to the right.

Also, iTunes 7.0 and greater will list the software version of the connected iPhone or iPod and can update the connected iPhone or iPod to the latest software version: <http://www.apple.com/itunes/download/>

## 3. iPod, iPad and iPhone Model Compatibility

Model Tested		Software Version	Model Tested		Software Version
iPod touch 4th gen	<input type="checkbox"/>	<input type="text"/>	iPod shuffle 4th gen	<input type="checkbox"/>	<input type="text"/>
iPod touch 3rd gen	<input type="checkbox"/>	<input type="text"/>	iPod shuffle 3rd gen	<input type="checkbox"/>	<input type="text"/>
iPod touch 2nd gen	<input checked="" type="checkbox"/>	<input type="text"/>	iPod shuffle 2nd gen	<input type="checkbox"/>	<input type="text"/>
iPod touch 1st gen	<input type="checkbox"/>	<input type="text"/>	iPod shuffle 1st gen	<input type="checkbox"/>	<input type="text"/>
iPod classic	<input type="checkbox"/>	<input type="text"/>	iPod with color display	<input type="checkbox"/>	<input type="text"/>
iPod with video	<input type="checkbox"/>	<input type="text"/>	iPod mini	<input type="checkbox"/>	<input type="text"/>
iPod nano 6th gen	<input type="checkbox"/>	<input type="text"/>	iPod with dock connector	<input type="checkbox"/>	<input type="text"/>
iPod nano 5th gen	<input type="checkbox"/>	<input type="text"/>	iPod with Click Wheel	<input type="checkbox"/>	<input type="text"/>
iPod nano 4th gen	<input type="checkbox"/>	<input type="text"/>	iPod	<input type="checkbox"/>	<input type="text"/>
iPod nano 3rd gen	<input type="checkbox"/>	<input type="text"/>	iPad (WiFi)	<input type="checkbox"/>	<input type="text"/>
iPod nano 2nd gen	<input type="checkbox"/>	<input type="text"/>	iPad (3G)	<input type="checkbox"/>	<input type="text"/>
iPod nano 1st gen	<input type="checkbox"/>	<input type="text"/>			
iPhone 4	<input type="checkbox"/>	<input type="text"/>			
iPhone 3GS	<input type="checkbox"/>	<input type="text"/>			

iPhone 3G	<input type="checkbox"/>	<input type="text"/>
iPhone	<input type="checkbox"/>	<input type="text"/>

## 4. Mandatory Specifications Conformity

Verify that the accessory conforms to all applicable requirements within the MFi Accessory Specifications.	<input type="radio"/> Pass
	<input type="radio"/> Fail

## 5. Mandatory Tests

### 5.1. Power

5.1.1. 1A charging accessories: Run the USB Vbus Load test via ATS Verify that USB Vbus is between 4.75V and 5.25V.	<input type="radio"/> Pass
	<input type="radio"/> Fail
	<input type="radio"/> N/A
5.1.2. 2.1A charging accessories: Verify that USB Vbus is between 4.60V and 5.25V up to a load current of 2.1 A (Note: requires test tools other than ATS)	<input type="radio"/> Pass
	<input type="radio"/> Fail
	<input type="radio"/> N/A
5.1.3. When providing power, verify that the switching frequency is always greater than the audio band (that is, more than 22 kHz) for all loads greater than 5 mA.	<input type="radio"/> Pass
	<input type="radio"/> Fail
	<input type="radio"/> N/A
5.1.4. When providing power, verify that the switching frequency must always be above 60 kHz, and preferably above 450 kHz, for all loads greater than 20 mA.	<input type="radio"/> Pass
	<input type="radio"/> Fail
	<input type="radio"/> N/A
5.1.5. Verify that the D+ and D- resistors are disabled if external Vbus power is supplied.	<input type="radio"/> Pass
	<input type="radio"/> Fail
	<input type="radio"/> N/A
5.1.6. Verify that that the following pins have been left disconnected (floating): 3, 5, 7, 9, 11, 12, 14 and 17	<input type="radio"/> Pass
	<input type="radio"/> Fail
	<input type="radio"/> N/A
5.1.7. If claiming iPad compatibility, all 30-pin or USB ports that supply power to the iPad must provide 2.1A charging.	<input type="radio"/> Pass
	<input type="radio"/> Fail
	<input type="radio"/> N/A

### 5.2. iAP

5.2.1. Use the accessory to control iPhone, iPod or iPad playback. Verify that a selected track plays when the Play button is selected.	<input type="radio"/> Pass
	<input type="radio"/> Fail
	<input type="radio"/> N/A
5.2.2. Verify that tapping the  << (back) and >>  (forward) on the accessory change the track on the iPod, iPhone or iPad.	<input type="radio"/> Pass
	<input type="radio"/> Fail
	<input type="radio"/> N/A
5.2.3. Verify that the accessory only identifies for iAP Lingos that it will use.	<input type="radio"/> Pass
	<input type="radio"/> Fail
	<input type="radio"/> N/A
5.2.4. Verify that pressing and holding the Play / Pause button for 5 seconds on the accessory results in the iPod, iPhone or iPad entering sleep mode. (NA for remote UI mode)	<input type="radio"/> Pass
	<input type="radio"/> Fail
	<input type="radio"/> N/A
5.2.5. Verify that accessory play / pause buttons wake the iPod, iPhone or iPad from sleep.	<input type="radio"/> Pass
	<input type="radio"/> Fail
	<input type="radio"/> N/A
5.2.6. If using iAP over USB; alternate Device mode- Verify that the resistor ID value is 191 kΩ. (Resistor tolerance must be 1% or less.)	<input type="radio"/> Pass
	<input type="radio"/> Fail
	<input type="radio"/> N/A
5.2.7. iAP over USB; USB Hotst mode. Verify that the resistor ID value is 28 kΩ	<input type="radio"/> Pass
	<input type="radio"/> Fail
	<input type="radio"/> N/A
5.2.8. Verify that the accessory has passed OTA testing for all models listed in the Accessory RF Certification Declarations. (Prototypes should include the Accessory RF Certification Declarations for the models that will be tested.)	<input type="radio"/> Pass
	<input type="radio"/> Fail
	<input type="radio"/> N/A

### 5.3. Battery Packs

5.3.1. Verify that battery pack uses a 255 kΩ resistor.	<input type="radio"/> Pass
	<input type="radio"/> Fail
	<input type="radio"/> N/A

5.3.2. If the battery pack has an On/Off switch, verify that the 'On' position powers the iPod, iPhone or iPad by the external battery pack. Verify the 'Off' position powers the iPod, iPhone or iPad by the iPod, iPhone or iPad internal battery.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
5.3.3. Verify that the accessory does not use the iPod, iPhone or iPad model numbers or lingo version alone to determine functionality.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
5.3.4. If using authentication, verify that the accessory identifies using IDPS.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
5.3.5. When communicating with an iPod that does not support IDPS, verify that the accessory identifies using IdentityDeviceLingoes.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
5.3.6. Verify that the accessory responds to the GetAccessoryInfo command from iPod / iPhone and uses the required fields as specified within the iPod / iPhone accessory specification documentation.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
5.3.7. Verify that all four digital grounds (pins 1, 2, 15 and 16) are connected together in the accessory if they are conducted by its cable.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
5.3.8. If using authentication, verify that the correct authentication coprocessor class is used.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
5.3.9. Verify that if the accessory supports transaction IDs, that the accessory responds to commands from the iPod, iPhone or iPad that contain a transaction ID with that ID in its response.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
5.3.10. Verify that if the accessory supports transaction IDs, that the accessory enables and disables support for transaction IDs according to the rules described within the specifications.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
<b>5.4. Mechanical Tests</b>	
5.4.1. Verify that the accessory connects securely to the iPod, iPhone or iPad.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
5.4.2. Verify that the accessory does not use external USB ports if it uses USB host mode.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
<b>5.5. Power Management Tests</b>	
5.5.1. If the accessory is an active USB host, verify that the accessory pauses the iPod before switching off its host controller.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
<b>5.6. Cable / Connector Requirements</b>	
5.6.1. Verify that all USB cables, connectors, and plugs meet all USB-IF requirements.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
5.6.2. Verify that the accessory does not use a female 30-pin iPod receptacle.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
5.6.3. If the accessory provides USB pass through, verify that when the accessory is connected to an external USB power source (such as a wall adapter or personal computer) that the external Vbus power source is passed through to the iPod/iPhone and that the D+/D- resistors are electrically removed from the accessory's D+/D- signals.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
5.6.4. Verify that when the cable is connected to the iPad's supplied USB charger, that USB Vbus is within spec while under load.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
5.6.5. If using a retractable USB cable with a 30-pin connector on one end, a version of the cable that has USB plugs at both ends must be certified by an independent USB-IF approved test lab to meet USB-IF requirements for the cable. A copy of the test results from the lab must be emailed to ipodselfcert@apple.com.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
<b>5.7. General Tests</b>	
5.7.1. Verify that the accessory does not use the iPod, iPhone or iPad as a USB Mass Storage accessory.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
5.7.2. Verify that audio is played as expected when connected to the iPhone, iPod or iPad.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A

5.7.3. Verify that Left / Right audio channels are not reversed.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
5.7.4. Verify that The Audio Return pin is not tied directly to the digital ground (DGND).	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
5.7.5. Verify that in Pause mode, the user can use all iPod, iPhone or iPad functions.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
5.7.6. Verify that the accessory does not hinder any of the iPod, iPhone or iPad functionality. E.g. – if your product uses a 3.5mm pass-through connector, it must support the the iPod's Headphone Remote and Mic system.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
5.7.7. Verify that the iPod, iPhone or iPad volume control works as expected when headphones are connected.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
5.7.8. Verify that no static or noise is heard while the iPod, iPhone or iPad is playing and when paused. Check at all volume levels.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
5.7.9. Verify that the iPod, iPhone or iPad can wake from sleep and hibernation while the accessory is connected.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
5.7.10. Verify that the iPod, iPhone or iPad and accessory function properly after waking from sleep and hibernation.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
5.7.11. Verify that all functions on the iPod, iPhone or iPad work a second time after disconnecting and reconnecting the accessory.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
5.7.12. Verify that disconnecting the accessory while it is operating does not negatively affect either the iPod, iPhone or iPad or the accessory.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
5.7.13. Verify that the accessory does not store copyrighted digital content received from the iPod, iPhone or iPad.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
5.7.14. Verify that the accessory does not transfer digital content received from the iPhone, iPod or iPad to another accessory capable of storing digital content.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A

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## 6. iPhone Specific Tests

6.1.1. Verify that line-out is enabled by requesting it using iAP commands or via the use of the appropriate resitor ID.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
6.1.2. Verify that if magnets are used in the accessory, that usage conforms to magnet requirements specified within the spec.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A

### 6.2. Production TDMA noise

6.2.1. PRODUCTION: Verify that the accessory will be submitted to an Apple authorized test lab for TDMA noise tests. (Does not apply to Japan-Only products. Japan-Only must be approved on submitted Product Plan.)	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
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## 7. Video Output

7.1. Verify that video content is displayed correctly. (Aspect ratios, subtitles off / on, Fit to screen)	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
7.2. Verify that video content plays with proper NTSC / PAL settings.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
7.3. Verify that there is no visible noise in the video output.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A

7.4. Verify that video output is displayed correctly when playing media at all supported video resolutions.	<input type="radio"/> Pass
	<input type="radio"/> Fail
	<input type="radio"/> N/A

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## 8. Display Remote and Extended Interface (Remote UI)

8.1. Verify the ability to select Next / Previous album, artist, playlist or track.	<input type="radio"/> Pass
	<input type="radio"/> Fail
	<input type="radio"/> N/A
8.2. Verify that the display shows the proper track, artist and album information.	<input type="radio"/> Pass
	<input type="radio"/> Fail
	<input type="radio"/> N/A
8.3. Verify that the display shows the proper pause, battery, shuffle, repeat and volume states.	<input type="radio"/> Pass
	<input type="radio"/> Fail
	<input type="radio"/> N/A
8.4. Verify the ability to control Play, Pause, Fast Forward and Back, Next Track, Previous Track on the iPhone, iPod or iPad.	<input type="radio"/> Pass
	<input type="radio"/> Fail
	<input type="radio"/> N/A
8.5. Verify that an iPhone, iPod or iPad in hibernate mode is correctly identified when connected.	<input type="radio"/> Pass
	<input type="radio"/> Fail
	<input type="radio"/> N/A
8.6. Verify that the iPhone, iPod or iPad enters sleep mode when the power is disabled.	<input type="radio"/> Pass
	<input type="radio"/> Fail
	<input type="radio"/> N/A
8.7. Verify that the iPod / iPhone re-enters extended mode when power is restored.	<input type="radio"/> Pass
	<input type="radio"/> Fail
	<input type="radio"/> N/A
8.8. Verify that album art is transferred to the accessory from the iPod / iPhone and is displayed properly.	<input type="radio"/> Pass
	<input type="radio"/> Fail
	<input type="radio"/> N/A

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## 9. Microphones (Applies to any accessory that sends audio to the iPod, iPhone or iPad for recording)

9.1. Verify ability to pause and resume recording.	<input type="radio"/> Pass
	<input type="radio"/> Fail
	<input type="radio"/> N/A
9.2. Verify that when 'Stop & Save' is selected the recording stops and the memo is saved.	<input type="radio"/> Pass
	<input type="radio"/> Fail
	<input type="radio"/> N/A
9.3. Verify that a recording plays without noise and in stereo if applicable.	<input type="radio"/> Pass
	<input type="radio"/> Fail
	<input type="radio"/> N/A
9.4. Verify the ability to make recordings of various lengths (30 seconds, 1 minute, 60 minutes, etc.)	<input type="radio"/> Pass
	<input type="radio"/> Fail
	<input type="radio"/> N/A

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## 10. Transmitters

10.1. Verify that the accessory begins broadcasting after playback begins on the iPhone, iPod or iPad.	<input type="radio"/> Pass
	<input type="radio"/> Fail
	<input type="radio"/> N/A
10.2. Verify that the accessory ends broadcasting when the iPhone, iPod or iPad enters sleep mode.	<input type="radio"/> Pass
	<input type="radio"/> Fail
	<input type="radio"/> N/A
10.3. Verify that the accessory conforms to the Power Policy requirements as specified within the iPod / iPhone specs.	<input type="radio"/> Pass
	<input type="radio"/> Fail
	<input type="radio"/> N/A

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## 11. Radio Tagging

11.1. Verify the ability to store single and multiple tags onto an iPod, iPhone or iPad.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
11.2. Verify the accessory properly indicates when a tag is available. The "tag available" indication appears when all required fields have been seen over the HD feed. The tag available indicator should appear with as little info as the artist and song title.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
11.3. Verify that tags are not written to the iPod, iPhone or iPad more than once.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
11.4. Verify that the accessory stores tags internally when not connected to an iPod, iPhone or iPad and can hold at least 50 tags.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
11.5. Verify that the accessory prompts the user to connect an iPod, iPhone or iPad when internal tag space is full.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
11.6. Verify that once a tag is written to the iPod, iPhone or iPad it is erased from the accessory.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
11.7. Verify that the accessory properly notifies the user when the iPod, iPhone or iPad's memory is full and that tags cannot be stored.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
11.8. Verify that the accessory properly notifies the user when a tag is captured. This feedback should be immediate, it should not occur after the tag ambiguity has been resolved.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
11.9. Verify the accessory successfully writes all tags stored internally to the iPod, iPhone or iPad and that all tags are properly transferred to iTunes.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
11.10. Verify that iTunes displays the correct song title, artist, album and other information for each bookmarked song.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
11.11. Verify the accessory successfully writes all tags stored internally to the iPod, iPhone or iPad when the iPod, iPhone or iPad is connected – regardless of what mode the accessory is in.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
11.12. Verify the accessory is pulling the timestamp data from the HD ALFN, and not from the accessories internal clock.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
11.13. Verify the accessory can encode data as base64 in order to support the UnknownData field.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
11.14. Verify that ambiguous tags are stored correctly: When the iTunes button on the accessory is pressed within +/- 10 seconds before or after a program service data change, both the previous and current tags are marked as ambiguous tags.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
11.15. Verify the accessory is properly setting the ButtonPressed and AmbiguousTag xml fields when encountering ambiguous tags.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
11.16. Verify that when a tag is ambiguous that both ambiguous twins are written to the iPod, iPhone or iPad at the same time (to the same file). An iPod, iPhone or iPad must be attached when this test is run.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
11.17. Verify tags are not written to iPod, iPhone or iPad before the tag ambiguity has expired (10 seconds after tag button is pressed).	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
11.18. Verify that tags are transferred to the iPod, iPhone or iPad when the accessory is in any source mode.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A

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## 12. FM Tuner – This feature is currently only available for iPod.

12.1. For iPod / iPhone models that do not have built-in radio, Verify that the "Radio" option appears on the iPods main menu when the tuner is connected.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
12.2. Verify that FM stations can be selected and tuned to when selecting the Radio option.	<input type="radio"/> Pass <input type="radio"/> Fail

	<input type="radio"/> N/A
12.3. Verify that only FM frequencies that are authorized for FM radio used for the region selected are tunable.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
12.4. Verify that RDS data is displayed on the iPod for stations broadcasting RDS info.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
12.5. Verify that the proper FM band and channel spacing is supported for the region where the accessory will be sold.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A

### 13. Automobile Head Units

13.1. Verify that the Shuffle feature works as expected. (Podcasts and Audiobooks are not played when in shuffle mode with the default "Skip When Shuffling" is selected for the selected track in iTunes. Verify by changing the "Skip When Shuffling" mode for various songs.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
13.2. Verify that songs with the maximum song title length can be included in playlists.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
13.3. Verify that the iPod / iPhone switches to Pause mode when the head unit is switched out of iPod mode.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
13.4. Verify that the iPod / iPhone switches to Pause mode when the ignition is turned off.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
13.5. Connect an iPod / iPhone with headphones attached and play music through the head unit. Remove the headphones. Music should NOT pause.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
13.6. iPhone only: Verify that the head unit passes the tests specified within RF Certification of Automotive Head Units section of the iPhone Accessory Interface Specification.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A

### 14. Industry Standard Prerequisites

14.1. Verify that cables have a minimum VW-1 flame rating and minimum ratings of 80°C and 30V.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
14.2. Verify that cables have a UL AWM style for external use.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A

### 15. Nike + iPod Cardio Equipment

15.1. Verify workout files against the XML validator at <a href="#">Nike Gym Data Validator</a>	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
15.2. Verify that workouts upload via iTunes and properly display at nikeplus.com.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
15.3. Verify that if user weight is available from iPod or iPhone, it is used on Gym equipment.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
15.4. Verify that the "iPod Full" message is displayed to the user on the Gym equipment UI when unable to open the file on iPod or iPhone.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
15.5. Verify that the user is presented with option to Opt-Out of workout recording.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
15.6. Verify that the proper Manufacturer ID is being used (assigned by Apple).	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A

15.7. Verify that if the iPod or iPhone is attached mid-workout, that the accessory properly records workout data.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
15.8. Verify that the recording indicator is present during the workout.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
15.9. Verify that the proper UI strings are displayed to user.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
15.10. Verify that the accessory declares itself as Nike+iPod Cardio equipment via Sports Lingo:RetDeviceCaps.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
15.11. Verify that weight entered / changed by user is written to iPod or iPhone.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
15.12. Verify that all tests within the Nike + iPod Cardio Equipment Validation Test document pass and have been submitted to Apple.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A

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## 16. Headphone Remote and Mic System

16.1. Verify that the accessory conforms to all applicable requirements within the Headphone Remote and Mic System specification documentation.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
16.2. Verify that a single click of the center (s0) button pauses / resumes music playback.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
16.3. Verify that a single click of the + (s2) button increases volume playback.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
16.4. Verify that a single click of the – (s1) button decreases volume playback.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
16.5. Verify that a double click of the center button (s0) advances to the next track.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
16.6. Verify that a triple click of the center button (s0) returns to the previous track.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
16.7. Verify that a click and hold of the + button (s2) increases volume playback.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
16.8. Verify that a click and hold of the – button (s1) decreases volume playback.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
16.9. Verify that ability to use the headset microphone to create a recording.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
16.10. Verify that the accessory works after leaving Disk Mode/Syncing with a host. (headset remains connected the entire time)	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
16.11. Verify that when using a 3rd generation iPod shuffle, pressing and holding the center button (s0) announces the song information via voiceover.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
16.12. Verify that when using a 3rd generation iPod shuffle, pressing and holding the center button (s0) until a tone is heard results in the playlist being announced.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
16.13. For 3.5 mm Headphone Plugs: Verify that the "Plug Length" is per Spec: 13.9 mm to 14.1 mm.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
16.14. For 3.5 mm Headphone Plugs: Verify that "Plug Diameter" is per spec: 3.45 mm to 3.53 mm.	<input type="radio"/> Pass <input type="radio"/> Fail



☐ N/A

16.15. For 3.5 mm Headphone Plugs: Verify that there are no conductive flanges as per spec.

☐ Pass  
☐ Fail  
☐ N/A

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## 17. Communication With iOS Applications

17.1. Verify that the accessory conforms to all applicable requirements within the Communication With iOS Applications specification documentation.

☐ Pass  
☐ Fail  
☐ N/A

17.2. Verify that accessory uses 2.0b authentication.

☐ Pass  
☐ Fail  
☐ N/A

17.3. Verify that Protocol names are in reverse DNS format.

☐ Pass  
☐ Fail  
☐ N/A

17.4. Verify that the accessory protocols are designed to recover from loss of data.

☐ Pass  
☐ Fail  
☐ N/A

17.5. Verify that the accessory and application support the same protocol features.

☐ Pass  
☐ Fail  
☐ N/A

17.6. Verify that the accessory uses IDPS and transaction IDs properly.

☐ Pass  
☐ Fail  
☐ N/A

17.7. Verify that you own the domain space, or have the permission of the domain space owner for the protocols listed.

☐ Pass  
☐ Fail  
☐ N/A

17.8. Verify that if the accessory sends GPS data to an iOS application, data is provided using Location Lingo.

☐ Pass  
☐ Fail  
☐ N/A

17.9. Verify that the accessory only communicates with one application.

☐ Pass  
☐ Fail  
☐ N/A

17.10. Verify that the accessory and application only communicate with each-other and authorized hardware.

☐ Pass  
☐ Fail  
☐ N/A

17.11. If the accessory supports Accessory Launching of iOS Applications, (Available for iPod's running iOS 4.0 or later only) verify that autolaunch feature works as described within the specifications.

☐ Pass  
☐ Fail  
☐ N/A

17.12. If the accessory supports Controlling Applications Using the Simple Remote Lingo, (Available for iPod's running iOS 4.0 or later only) verify that all commands sent conform with the specifications.

☐ Pass  
☐ Fail  
☐ N/A

17.13. If claiming iPad compatibility, the application(s) must be iPad native (support full iPad resolution) and can not be iPhone only.

☐ Pass  
☐ Fail  
☐ N/A

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## 18. Communication With iOS Applications – Questions

18.1. List the name of the application used for this accessory.

18.2. List the name and Bundle Seed ID of your application.

18.3. Is the application available on the App Store?

☐ Yes  
☐ No

In addition to a prototype/pre-production sample, please ensure that the associated iOS application is submitted to Apple. Include application along with the sample. Please contact your MFi Account Specialist for details.

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## 19. iAP over Bluetooth

- |  |   |
|--|---|
| 19.1. Verify that the accessory can pair with the iPhone using normal Bluetooth pairing mechanisms.  | <input type="radio"/> Pass<br><input type="radio"/> Fail<br><input type="radio"/> N/A |
| 19.2. Verify that the accessory establishes an RFCOMM protocol connection to the iPhone after pairing is complete.   | <input type="radio"/> Pass<br><input type="radio"/> Fail<br><input type="radio"/> N/A |
| 19.3. Verify that the accessory looks for the proper 128-bit big-endian UUID in the iPhone Service Discovery Protocol record.  | <input type="radio"/> Pass<br><input type="radio"/> Fail<br><input type="radio"/> N/A |
| 19.4. Verify that the accessory sets the proper big-endian UUID value in its Service Discovery Protocol record.  | <input type="radio"/> Pass<br><input type="radio"/> Fail<br><input type="radio"/> N/A |
| 19.5. Verify that when re-establishing a connection, the accessory makes a Bluetooth SDP query to find the RFCOMM channel associated with the proper UUID in the iPhone. | <input type="radio"/> Pass<br><input type="radio"/> Fail<br><input type="radio"/> N/A |
| 19.6. Verify that the accessory does not assume that the channel will remain the same between connections.   | <input type="radio"/> Pass<br><input type="radio"/> Fail<br><input type="radio"/> N/A |
| 19.7. Verify that the accessory uses IDPS and transaction IDs properly.  | <input type="radio"/> Pass<br><input type="radio"/> Fail<br><input type="radio"/> N/A |
- 

## 20. iPodOut Lingo

- |   |   |
|---|---|
| 20.1. For audio transport, verify that the accessory uses either analog Line Out or digital audio over USB.   | <input type="radio"/> Pass<br><input type="radio"/> Fail<br><input type="radio"/> N/A |
| 20.2. During the IDPS process, verify that the accessory passes a ScreenInfoToken and that it sets its Video Out and, if applicable, analog audio transport preferences for iPodOut mode as part of the IDPS process. | <input type="radio"/> Pass<br><input type="radio"/> Fail<br><input type="radio"/> N/A |
| 20.3. Verify the selection of the video output connection type, aspect ratio, closed captions and subtitles. (Available only to recent iPod models that support video output)   | <input type="radio"/> Pass<br><input type="radio"/> Fail<br><input type="radio"/> N/A |
| 20.4. Verify that the video output mode is NTSC only.   | <input type="radio"/> Pass<br><input type="radio"/> Fail<br><input type="radio"/> N/A |
- 

## 21. Location Lingo

- |   |   |
|---|---|
| 21.1. Verify that the accessory generates NMEA GPS location sentences that support at least the GPGLA sentence type.            | <input type="radio"/> Pass<br><input type="radio"/> Fail<br><input type="radio"/> N/A |
| 21.2. Verify that if the accessory supports additional sentence types, it must provide them to the iPod, iPhone or iPad.        | <input type="radio"/> Pass<br><input type="radio"/> Fail<br><input type="radio"/> N/A |
| 21.3. Verify that the accessory enables filtering to filter all sentence types that it does not support.                        | <input type="radio"/> Pass<br><input type="radio"/> Fail<br><input type="radio"/> N/A |
| 21.4. Verify that the accessory uses IDPS and transaction IDs properly.   | <input type="radio"/> Pass<br><input type="radio"/> Fail<br><input type="radio"/> N/A |
| 21.5. Verify that the accessory identifies using authentication 2.0 as described within the spec.                               | <input type="radio"/> Pass<br><input type="radio"/> Fail<br><input type="radio"/> N/A |
| 21.6. Verify that the accessory complies with the requirements described within the spec for the future lingo section.          | <input type="radio"/> Pass<br><input type="radio"/> Fail<br><input type="radio"/> N/A |
| 21.7. Verify that if the accessory initializes its control state to empty or disabled when the connection is first established. | <input type="radio"/> Pass<br><input type="radio"/> Fail<br><input type="radio"/> N/A |

21.8. Verify that the power management control support bit is set for iPod, iPhone or iPad-powered accessories.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
21.9. Verify that accessory supports the power off / power on bits sent from iPod, iPhone or iPad.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
21.10. Verify that the accessory meets all of the requirements described within the Location Lingo section of the accessory spec.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A

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## 22. AirPlay

22.1. Verify that streaming is successful to all speakers selected within iTunes or iOS device.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
22.2. Verify ability to properly stream via Ethernet.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
22.3. Verify ability to properly stream via 802.11b/g.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
22.4. Verify ability to properly stream via 802.11n.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
22.5. Verify ability to properly stream via 802.11 with a password.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
22.6. Verify that if the AirPlay device receives an audio stream and the device is not actively engaged in playback on another source, it must automatically switch its audio in- put source to the audio stream.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
22.7. Devices with a display – Verify that the Network Connection message appears on the display.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
22.8. Devices with a display – Verify that the Network Problem message appears on the display.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
22.9. Devices without a display – Verify that LED 1 illuminates BLINKING, COLOR B to indicate a Network Problem.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
22.10. Devices with a display – Verify that the Critical Firmware Message can appear on the display.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
22.11. Devices with a display – Verify that the Source Input Label appears on the display.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
22.12. Devices with a display – Verify that either a Logo or text appears on the display indicating that a stream is in progress.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
22.13. Devices without a display – Verify that LED 1 illuminates BLINKING, COLOR C to indicate a critical firmware problem.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
22.14. Devices with a display – Verify text = “Successfully connected to [NETWORK NAME].” upon network connection.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
22.15. Devices with a display – Verify text = “Cannot connect to [NETWORK NAME]. Please try again.” upon network problem.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
22.16. Devices with a display –Verify text = “Please reset device by [RESET METHOD].” upon critical firmware problem.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
22.17. Devices with a display – Verify text = “AirPlay” as the source label.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A

22.18. Verify that the device starts playback of the currently selected track in iTunes. The AirPlay device that initiated the play event must be enabled as a playback endpoint (if not previously enabled in iTunes the command will have no effect). Other endpoints in the network will retain their ON/OFF settings as previously set.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
22.19. Verify that the device pauses the playback of the currently playing track in iTunes. Other endpoints in the network will retain their ON/OFF settings and audio stream state as previously set.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
22.20. Verify that the device skips to the next/previous track in the current playlist of iTunes. Has no effect if there is not a currently playing track in iTunes. Previous track command automatically skips to the start of the song if more than 5 seconds of the currently playing track has passed.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
22.21. Verify that the device streams and moves through the track when press and holding next track/previous track.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
22.22. Verify that the device toggles the iTunes shuffle setting from it's current state to the next in the progression (... shuffle all songs, shuffle off ...).	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
22.23. Verify that the device toggles the iTunes repeat setting from it's current state to the next in the progression (... repeat all songs, repeat single song, repeat off ...).	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
22.24. Verify that the device Controls the output volume of the local AirPlay device. Does not affect other AirPlay devices.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
22.25. Verify that the device Controls the output volume of the local AirPlay device from a remote control point. If a AirPlay device supports Remote volume control it MUST also support feedback of its local volume setting.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
22.26. Verify that the device Controls the audio input source of the local AirPlay device. If an audio stream session is active and the audio input source is changed to an alternate source, the AirPlay device MUST send a deselection of the AirPlay device output path to iTunes.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
22.27. Confirm all settings are intact and streaming to remote speakers continues to function.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
22.28. Verify ability to update firmware.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
22.29. Verify that when the AirPlay device is in a low-power state, it must continue to maintain its Bonjour advertisements, respond to Bonjour queries, and accept TCP connection requests to start an audio stream session.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
22.30. Verify that while the audio stream session is active, the AirPlay device must remain in a power state that allows it to play audio and receive TCP data and UDP packets.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
22.31. Verify that the device responds to all supported commands from iTunes Remote iOS application.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
22.32. Confirm all settings are intact and streaming to remote speakers continues to function after quitting and relaunching iTunes.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A
22.33. Verify that the device responds to all supported commands from iTunes Remote iOS application.	<input type="radio"/> Pass <input type="radio"/> Fail <input type="radio"/> N/A

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## 22. Please enter any comments or failure explanations.

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## 23. Self-Certification TDMA test file upload.

23.1. Will you be submitting additional TDMA test results in addition to the self-certification test form? ☐ Yes ☐ No

If yes, please add the additional file.

[Add File](#)

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☐ By checking this box, submitter acknowledges that they may not go into production until the production self-certification test form and production ready samples have been submitted to the Apple Self-Certification Department and the licensee has received acknowledgement from Apple that self-certification is complete.

Submit