APPENDIX A3.1-2

FUNCTIONAL DESIGN SPECIFICATION - DEVICE

Confidentiality Statement

Confidentiality Statement: Data and information contained in this document are considered to constitute trade secrets and confidential commercial information, and the legal protections provided to such trade secrets and confidential information are hereby claimed under the applicable provisions of United States law. No part of this document may be publicly disclosed without the written consent of Philip Morris International.

FUNCTIONAL DESIGN SPECIFICATIONS (FDS)
PLATFORM 1 – THS v2.2

DOCUMENT PDIMS NUMBER: DAW-000596

PROGRAM NAME	Platform 1
PROJECT NAME	P1 Product Development
EXPERIMENTAL WORK TYPE	Exploratory ☐ Developmental ☐ Regulatory submission ☑
APPROVER	Michael Scharer
AUTHOR	Julien Plojoux

FDS - PLATFORM 1/THS v2.2

Table of Contents

1 Introduction 3
2 Purpose 3
3 Relationships Between Modules 4
4 Definitions 5
5 Functional Design Specifications 7
5.1 Charger 7
5.2 Tobacco Stick Holder (TSH) 12
5.3 Interface (Holder / Charger) 18
6 Revision History 19
7 Related Documents 19
8 Traceability Matrix TPP-FDS 19
9 Review and approval 24

1 Introduction

Platform 1 (P1) prototypes based on Tobacco Heating System (THS) was developed at PMI. The THS, consists of two modules: the Pocket Charger or Main Unit (MU) and the Tobacco Stick Holder (TSH). The MU provides storage for the TSH and holds the electronics together with a high capacity battery. The TSH provides the means to electrically heat the Tobacco Stick (also named Heat Stick) and the electronics to regulate the heated tobacco temperature. It has a small battery with enough capacity to smoke at least one Tobacco Stick.



Figure 1: Device Principle

This document describes the Next Generation Products (NGPs) Functional Design Specifications (FDS) for the P1 Tobacco Heating System (model 2.2).

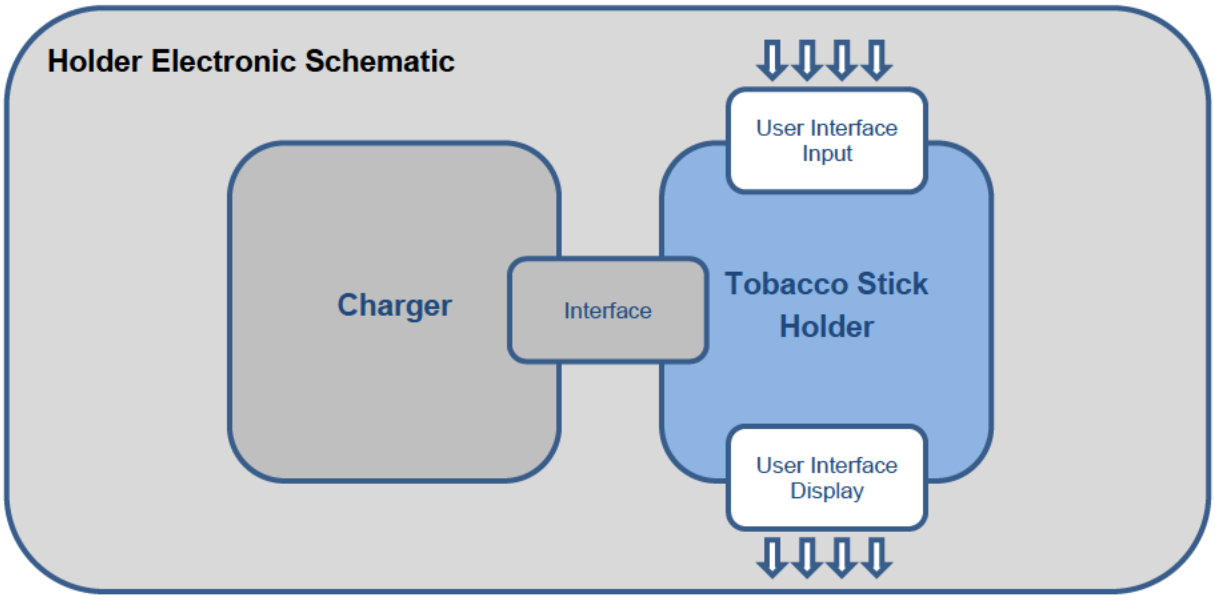
It is the result of updating the latest FDS's of P1 Tobacco Heating System (model 2.2) established in scope of product City Launch (P1 PDev_Functional Design Specifications - platform 1_THS 2.2), according to new, modified and/or suppressed requirements.

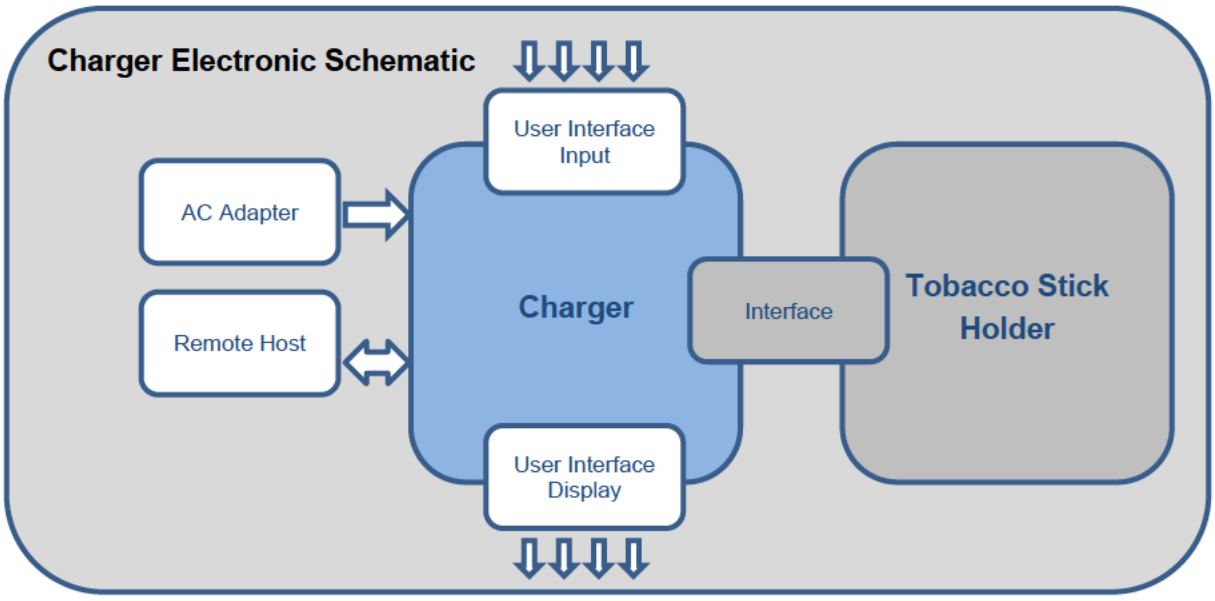
2 Purpose

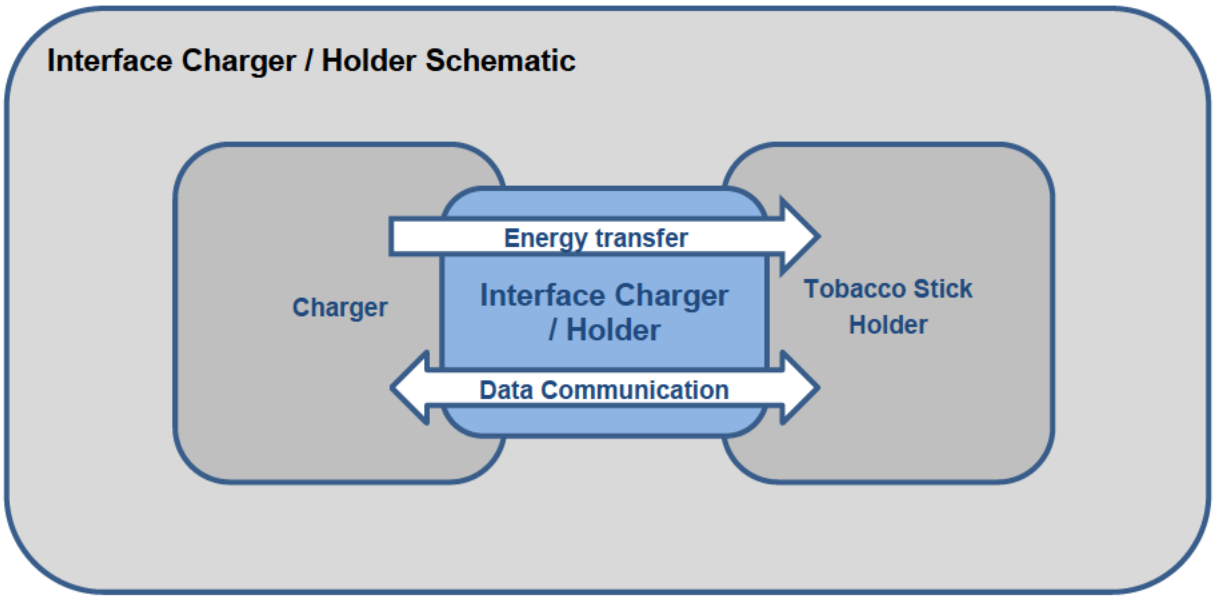
The purpose of this document is to list and describe the Functional Design Specifications (FDS) for the Tobacco Heating System (model 2.2).

The set of Functional Requirements (FR) are listed and numbered with a unique identification number for all FDS derived from the same Target Product Profile.

3 Relationships Between Modules







4 Definitions

The system described in the present document is known as **Tobacco Heating System 2.2 (THD 2.4)**. It contains a number of components with specific denominations:

Charger

The Charger is mainly driving two different flows (except concerning the car charger for which only the energy flow applies):

The energy flow: energy is coming from external power source, can be stored in the Charger battery, and transferred to the Tobacco Stick Holder. The Charger will contain all elements to control the input energy flow and the output energy flow.

The data/command flow: bidirectional information has to be exchanged between the Charger and a dedicated PC application as well as between the Charger and the Tobacco Stick Holder, collectively referred to as *Tobacco Heating System*.

It contains a battery with sufficient capacity to recharge the Holder approximately 20 times. The Charger is of a convenient size to carry around, and can itself be recharged from a mains power source.

The Charger stores energy to recharge the Tobacco Stick Holder battery before every Tobacco Heating System Aerosol (THS-A) Inhalation Experience and initiates cleaning procedures upon THS User requests.

An external AC/DC adapter supplies power to the Charger to recharge its battery.

(b) (4) .

The THS User can interact with the Charger using a button to activate Charger functions and get information from the Charger through LEDs. The Charger will neither start THS-A Inhalation Experience

nor will it control the heating process itself (b) (4)
(b) (4)

Tobacco Stick Holder (Holder)

The Tobacco Stick Holder is the electrical tobacco heating device with a small battery which stores enough power for a single THD 2.4 Tobacco Stick use. The Holder contains a heating element which heats the tobacco plug when activated, an extracting system named Extractor or Holder Cap used to remove the Tobacco stick after use and a button and LED based user interface reflecting the current system state.

The primary function of the Tobacco Stick Holder is to heat the Tobacco Stick, delivering an aerosol to the THS user. The electrical heating is powered from an internal battery which delivers power allowing complete use of a single Tobacco Stick. The microcontroller of the Tobacco Stick Holder application controls a heating element based on temperature feedback. A specified heating profile defines the evolution of the temperature of the heating element with time for a whole THS-A Inhalation Experience. While a Tobacco Stick is heated, the Tobacco Heating Device is able to detect when a puff is taken.

(b) (4)

(b) (4)

Tobacco Stick

The Tobacco Stick is custom-designed to function with the Holder and contains the tobacco plug used to generate the aerosol.

The Tobacco Stick contains tobacco which, when heated, generates an aerosol. It is custom-designed to be used with the Holder.

Tobacco Heating Device

Tobacco Heating Device includes: Holder, Charger, Cleaning Tool, Power Supply and USB cable. The Device comprises everything in THS 2.2 except the Tobacco Stick.

ON mode

When the ON mode is enabled, the device circuitry is enabled and leaves energy save mode. In some other documents, the ON mode is also named idle mode.

OFF mode

When the OFF mode is enabled, the device circuitry is disabled and enters in energy save mode. In some other documents, the OFF mode is also named Airplane mode, Flight mode, Safety mode or Energy saving mode.

USB Host

A USB host may implement multiple host controllers and each host controller may provide one or more USB ports.

Remote Host

A remote Host can be any type of device under PMI control that can be used to communicate with THS 2.2.

5 Functional Design Specifications

5.1 Charger

Functional Design Specification (FDS)			
Product Part	**Group**	**Functional Requirement #**	**Functional Requirement Description**
Charger	Electronic & Software	FR-01-001	The Charger shall recharge its battery from normally discharged (normally discharged being after 20 THS-A Inhalation Experience with reference Tobacco Stick) to fully charged in less than 90 minutes when using external power source able to deliver at least 10 Watts.
Charger	Electronic & Software	FR-01-002	The Charger shall start recharging its battery as soon as an external power source is connected.
Charger	Electronic & Software	FR-01-003	The Charger shall recharge its battery regardless of its status (ON/OFF mode).
Charger	Usage Conditions	FR-01-054	The Charger shall recharge its battery regardless of the presence of Holder.
Charger	Electronic & Software	FR-01-004	The Charger shall recharge the Holder when its presence is detected by the Charger and shall maintain charge as long as the Holder stays in the Charger under condition of FR-01-005.
Charger	Electronic & Software	FR-01-005	The Charger shall recharge the Holder only when the Charger is in ON mode.
Charger	Electronic & Software	FR-01-006	(b) (4)
Charger	Electronic & Software	FR-01-007	The Charger (from fully charged) shall recharge the Holder at least 20 times over the period of one week, without itself being recharged in this period. This requirement is valid at least for the lifespan descr bed in FR-01-043.
Charger	Electronic & Software	FR-01-008	The Charger shall recharge the discharged Holder regardless of the charged state of the Holder – specifically the Charger shall be able to recharge a completely discharged Holder.
Charger	Electronic & Software	FR-01-009	The Charger shall recharge the Holder in less time than the duration of a preceding THS-A Inhalation Experience.
Charger	Electronic & Software	FR-01-010	(b) (4)
Charger	Electronic & Software	FR-01-011	(b) (4)

Functional Design Specification (FDS)			
Product Part	**Group**	**Functional Requirement #**	**Functional Requirement Description**
Charger	Electronic & Software	FR-01-069	The Charger shall initiate the cleaning process of the Holder automatically when requested by the Holder.
Charger	Electronic & Software	FR-01-014	The Charger shall connect and communicate with USB Host.
Charger	Electronic & Software	FR-01-015	(b) (4)
Charger	Electronic & Software	FR-01-016	
Charger	Electronic & Software	FR-01-017	
Charger	Electronic & Software	FR-01-018	
Charger	Electronic & Software	FR-01-019	
Charger	Electronic & Software	FR-01-020	
Charger	Electronic & Software	FR-01-021	
Charger	Electronic & Software	FR-01-023	
Charger	Electronic & Software	FR-01-024	
Charger	Electronic & Software	FR-01-025	
Charger	Electronic & Software	FR-01-026	
Charger	Electronic & Software	FR-01-027	
Charger	Electronic & Software	FR-01-070	

Functional Design Specification (FDS)			
Product Part	**Group**	**Functional Requirement #**	**Functional Requirement Description**
Charger	Electronic & Software	FR-01-029	(b) (4)
Charger	Electronic & Software	FR-01-057	The Charger User Interface Display shall display a changed condition in response to a user request (through the Charger User Interface Input). Changed condition to be displayed through visual indicators: • ON mode enabled • OFF mode enabled
Charger	Electronic & Software	FR-01-030	The Charger User Interface Input shall permit the user to initiate manually the cleaning process of the Tobacco Stick Holder.
Charger	Electronic & Software	FR-01-031	The Charger User Interface Input shall permit the user to check the current status of the Holder and Charger.
Charger	Electronic & Software	FR-01-032	The Charger User Interface Display shall display the current status of the Charger, in response to a user request (through the Charger User Interface Input), or in response to a changed condition. Current status to be displayed through visual indicators: • Charging state of the Charger • Error state of the Charger
Charger	Electronic & Software	FR-01-033	The Charger User Interface Display shall display the current status of the Holder, in response to a user request (through the Charger User Interface Input), or in response to a changed condition. Current status to be displayed through visual indicators: • Presence of the Holder detected in the Charger • Charging state of the Holder • Error state of the Holder
Charger	Mechanic	FR-01-062	The Charger housing slot shall not leave wearing marks on the surface of the Holder housing and preserve its soft-touch surface finish.
Charger	Mechanic	FR-01-063	(b) (4)
Charger	Mechanic	FR-01-035	The Charger shall comprise a Charger Lid (Hatch) to close the Holder compartment and hold the Holder when inserted into the Charger.

Functional Design Specification (FDS)			
Product Part	**Group**	**Functional Requirement #**	**Functional Requirement Description**
Charger	Mechanic	FR-01-064	(b) (4)
Charger	Mechanic	FR-01-065	
Charger	Mechanic	FR-01-036	The Charger shall provide means to open the Charger Lid of the Holder compartment.
Charger	Mechanic	FR-01-037	The Charger Lid shall open 90° angle.
Charger	Assembly	FR-01-039	The Charger shall be less than 200 grams weight.
Charger	Assembly	FR-01-040	The Charger shall be less than 120 mm height.
Charger	Assembly	FR-01-041	The Charger shall be less than 80 mm width.
Charger	Assembly	FR-01-042	The Charger shall be less than 40 mm depth.
Charger	Usage Conditions	FR-01-043	(b) (4)
Charger	Usage Conditions	FR-01-044	
Charger	Usage Conditions	FR-01-045	
Charger	Usage Conditions	FR-01-047	
Charger	Usage Conditions	FR-01-048	
Charger	Usage Conditions	FR-01-049	
Charger	Usage Conditions	FR-01-050	The Charger shall comply with EMC (electromagnetic compatibility) / ESD (electrostatic discharge) Directives (2004/108/EC).
Charger	Usage Conditions	FR-01-051	(b) (4)
Charger	Usage Conditions	FR-01-060	

Functional Design Specification (FDS)			
Product Part	**Group**	**Functional Requirement #**	**Functional Requirement Description**
Charger	Usage Conditions	FR-01-066	(b) (4)
Charger	Usage Conditions	FR-01-067	The Charger shall not cause any adverse event that can compromise the safety of the user (e.g. battery swelling and leakage, overheating) when exposed to water ingress such as rain and/or water immersion.
Charger	Usage Conditions	FR-01-068	(b) (4)
Charger	Usage Conditions	FR-01-052	The Charger shall comply with Hazardous Materials RoHS Directive (2011/65/EU).
Charger	Usage Conditions	FR-01-058	The Charger bill of materials shall pass PMI toxicological evaluation of the materials that may affect aerosol formation, composition, release and transfer to the mainstream/side-stream aerosol.
Charger	Usage Conditions	FR-01-053	The Charger shall comply with Batteries and Battery Waste Directives (2006/66/EC).
Charger	Usage Conditions	FR-01-055	The Charger shall comply with Low Voltage Directives (2006/95/EC) with amendment(s) for priority launch markets (EU, US, Korea &Japan).
Charger	Usage Conditions	FR-01-059	The Charger shall comply with Standard for Safety of Flammability of Plastic Materials for Parts in Devices and Appliances testing (UL 94).
Charger	Usage Conditions	FR-01-071	The Charger shall comply with REACH Regulation (EC) 1907/2006.
Charger	Usage Conditions	FR-01-072	The Charger shall comply with Ecodesign Directive (2009/125/EC).
Charger	Usage Conditions	FR-01-073	The Charger shall comply with Waste Electrical & Electronic Equipment WEEE Directive (2012/19/EU).
Charger	Usage Conditions	FR-01-074	The Charger shall comply with CE marking Directive (63/68/EEC).

5.2 Tobacco Stick Holder (TSH)

Functional Design Specification (FDS)			
Product Part	**Group**	**Functional Requirement #**	**Functional Requirement Description**
Tobacco Stick Holder	Electronic & Software	FR-02-001	(b) (4)
Tobacco Stick Holder	Electronic & Software	FR-02-003	
Tobacco Stick Holder	Electronic & Software	FR-02-004	
Tobacco Stick Holder	Electronic & Software	FR-02-005	
Tobacco Stick Holder	Electronic & Software	FR-02-006	
Tobacco Stick Holder	Electronic & Software	FR-02-058	
Tobacco Stick Holder	Electronic & Software	FR-02-008	
Tobacco Stick Holder	Electronic & Software	FR-02-009	
Tobacco Stick Holder	Electronic & Software	FR-02-012	The Tobacco Stick Holder shall perform the cleaning process when inserted in the Charger and requested by the Charger interface input.
Tobacco Stick Holder	Electronic & Software	FR-02-059	(b) (4)
Tobacco Stick Holder	Electronic & Software	FR-02-060	
Tobacco Stick Holder	Electronic & Software	FR-02-013	
Tobacco Stick Holder	Electronic & Software	FR-02-014	

Functional Design Specification (FDS)			
Product Part	**Group**	**Functional Requirement #**	**Functional Requirement Description**
Tobacco Stick Holder	Electronic & Software	FR-02-015	(b) (4)
Tobacco Stick Holder	Electronic & Software	FR-02-016	The Tobacco Stick Holder shall abort the cleaning process when removed from the Charger.
Tobacco Stick Holder	Mechanic	FR-02-061	The Tobacco Stick Holder shall allow THS User to perform a manual cleaning (with a dedicated cleaning tool) of the heating chamber after complete removal of the Tobacco Stick extracting system.
Tobacco Stick Holder	Electronic & Software	FR-02-019	(b) (4)
Tobacco Stick Holder	Electronic & Software	FR-02-020	
Tobacco Stick Holder	Electronic & Software	FR-02-021	
Tobacco Stick Holder	Electronic & Software	FR-02-062	
Tobacco Stick Holder	Electronic & Software	FR-02-022	
Tobacco Stick Holder	Electronic & Software	FR-02-024	
Tobacco Stick Holder	Electronic & Software	FR-02-026	
Tobacco Stick Holder	Electronic & Software	FR-02-027	

Functional Design Specification (FDS)			
Product Part	**Group**	**Functional Requirement #**	**Functional Requirement Description**
Tobacco Stick Holder	Electronic & Software	FR-02-063	(b) (4)
Tobacco Stick Holder	Electronic & Software	FR-02-028	
Tobacco Stick Holder	Electronic & Software	FR-02-033	
Tobacco Stick Holder	Electronic & Software	FR-02-034	The Holder User Interface Input shall permit the user to start the heating process.
Tobacco Stick Holder	Electronic & Software	FR-02-035	The Holder User Interface Input shall permit the user to stop the heating process at any time.
Tobacco Stick Holder	Electronic & Software	FR-02-036	The Holder User Interface Input shall permit the user to check the status of the Holder.
Tobacco Stick Holder	Electronic & Software	FR-02-037	The Holder User Interface Display shall display the self-test status of the Holder in response to a user request (through the Holder User Interface Input), or when the Holder is extracted from the Charger. Self-test status to be displayed: • Charging state of the Holder (fully charged or needs charging) • Error state
Tobacco Stick Holder	Electronic & Software	FR-02-038	The Holder User Interface Display shall display the current status of the Holder in response to a user request (through the Holder User Interface Input), or in response to a changed condition. Current status to be displayed: • OFF (locked) mode • Ready • Ambient temperature out of operating range (see FR-02-048) • Pre-heating process in progress • Heating process in progress • Heating process ending / completed • Discharged • Holder battery aged status

Functional Design Specification (FDS)			
Product Part	**Group**	**Functional Requirement #**	**Functional Requirement Description**
Tobacco Stick Holder	Mechanic	FR-02-039	The Tobacco Stick Holder shall provide means to heat a Tobacco Stick (referred to as "heater" in this Functional Design Specification), in order to generate THS Aerosol deliveries according to known system performance requirements (overall deliveries and puff-by-puff profile using reference Tobacco Stick, under Health Canada regime, 12 puffs).
Tobacco Stick Holder	Mechanic	FR-02-072	The Tobacco Stick Holder shall provide means to clean the heating blade (also referred to as "heater" in this Functional Design Specification), in order to remove residues with no emissions that are of toxicological concern.
Tobacco Stick Holder	Mechanic	FR-02-041	The Tobacco Stick Holder shall hold the Tobacco Stick while keeping a protruding length of 20 mm out of the Holder on 45mm long Tobacco Sticks.
Tobacco Stick Holder	Mechanic	FR-02-042	The Tobacco Stick Holder shall provide means to extract Tobacco Sticks (consumed or not), (b) (4) .
Tobacco Stick Holder	Mechanic	FR-02-043	The Tobacco Stick Holder shall contain airflow paths allowing air to enter into the Tobacco Stick with a resistance to draw (RTD) of 8 +/- 5 mmH2O.
Tobacco Stick Holder	Assembly	FR-02-044	The Tobacco Stick Holder shall be less than 20 grams weight.
Tobacco Stick Holder	Assembly	FR-02-045	The Tobacco Stick Holder shall be less than 93 mm long.
Tobacco Stick Holder	Assembly	FR-02-046	The Tobacco Stick Holder shall be less than 14 mm in the outer cross section dimension.
Tobacco Stick Holder	Usage Conditions	FR-02-047	(b) (4)
Tobacco Stick Holder	Usage Conditions	FR-02-048	
Tobacco Stick Holder	Usage Conditions	FR-02-049	
Tobacco Stick Holder	Usage Conditions	FR-02-051	

Functional Design Specification (FDS)			
Product Part	**Group**	**Functional Requirement #**	**Functional Requirement Description**
Tobacco Stick Holder	Usage Conditions	FR-02-052	(b) (4)
Tobacco Stick Holder	Usage Conditions	FR-02-053	
Tobacco Stick Holder	Usage Conditions	FR-02-054	The Tobacco Stick Holder shall comply with EMC (electromagnetic compat bility) / ESD (electrostatic discharge) Directives (2004/108/EC).
Tobacco Stick Holder	Usage Conditions	FR-02-055	(b) (4)
Tobacco Stick Holder	Usage Conditions	FR-02-067	
Tobacco Stick Holder	Usage Conditions	FR-02-068	The Tobacco Stick Holder shall not cause any adverse event that can compromise the safety of the user (e.g. electrical shock, battery swelling and leakage, heater temperature out of control…) when exposed to water ingress such as rain and/or water immersion.
Tobacco Stick Holder	Usage Conditions	FR-02-069	(b) (4)
Tobacco Stick Holder	Usage Conditions	FR-02-070	The Tobacco Stick Holder rear housing shall not be removable by the user so that the Holder battery cannot be easily accessed.
Tobacco Stick Holder	Usage Conditions	FR-02-071	(b) (4)
Tobacco Stick Holder	Usage Conditions	FR-02-056	The Tobacco Stick Holder shall comply with Hazardous RoHS Materials Directives (2011/65/EU).
Tobacco Stick Holder	Usage Conditions	FR-02-064	(b) (4)
Tobacco Stick Holder	Usage Conditions	FR-02-057	The Tobacco Stick Holder shall comply with Batteries and Battery Waste Directives (2006/66/EC).
Tobacco Stick Holder	Usage Conditions	FR-02-065	The Tobacco Stick Holder shall comply with Low Voltage Directives (2006/95/EC) with amendment(s) for priority launch markets (EU, US, Korea &Japan).

Functional Design Specification (FDS)			
Product Part	**Group**	**Functional Requirement #**	**Functional Requirement Description**
Tobacco Stick Holder	Usage Conditions	FR-02-066	The Tobacco Stick Holder shall comply with Standard for Safety of Flammability of Plastic Materials for Parts in Devices and Appliances testing (UL 94).
Tobacco Stick Holder	Usage Conditions	FR-02-073	The Tobacco Stick Holder shall comply with REACH Regulation (EC) 1907/2006.
Tobacco Stick Holder	Usage Conditions	FR-02-074	The Tobacco Stick Holder shall comply with Ecodesign Directive (2009/125/EC).
Tobacco Stick Holder	Usage Conditions	FR-02-075	The Tobacco Stick Holder shall comply with Waste Electrical & Electronic Equipment WEEE Directive (2012/19/EU).
Tobacco Stick Holder	Usage Conditions	FR-02-076	The Tobacco Stick Holder shall comply with CE marking Directive (63/68/EEC).

5.3 Interface (Holder / Charger)

Functional Design Specification (FDS)			
Product Part	**Group**	**Functional Requirement #**	**Functional Requirement Description**
Interface Charger-Holder	Electronic & Software	FR-03-001	(b) (4)
Interface Charger-Holder	Electronic & Software	FR-03-002	
Interface Charger-Holder	Electronic & Software	FR-03-004	The Interface shall provide means to detect the presence or absence of a Holder in the Charger.
Interface Charger-Holder	Electronic & Software	FR-03-005	The exposed surfaces of the Interface connectors shall be adequately protected for touching by the user (i.e. prevent damage by electrostatic discharge).
Interface Charger-Holder	Mechanic	FR-03-006	(b) (4)
Interface Charger-Holder	Mechanic	FR-03-007	The Charger shall host the Holder in a housing slot, where Holder is inserted for transportation and charging.
Interface Charger-Holder	Usage Conditions	FR-03-008	(b) (4)

Coding rule of Next Generation Products (NGPs) Specifications, Requirements and Tests:
PMI_RD_WKI_000024

6 Revision History

Description of Change	Version
Original issue	1.0
FR-01-051 tested separately from FR-03-008; FR-02-043: (b) (4) FR-02-071 (LVD) renumbered to FR-02-065 because of number duplicate; FR-02-072 (UL94) renumbered to FR-02-066 because of number duplicate	2.0
Submission Version, with references updated to link to appendices	2.0 SV

7 Related Documents

Document Name
Appendix A3.2.1-2

8 Traceability Matrix TPP-FDS

For related documents, see § 7.

TPP clause #	TPP description	Functional Requirement #
TPP 1.1.3	Safety and hazard assessment	FR-01-010 FR-01-011 FR-01-029 FR-01-047 FR-01-050 FR-01-055 FR-01-058 FR-01-059 FR-02-005 FR-02-006 FR-02-008 FR-02-019 FR-02-020 FR-02-039 FR-02-051 FR-02-054 FR-02-056 FR-02-058 FR-02-063 FR-02-064 FR-02-065 FR-02-066 FR-03-005 FR-03-008
TPP 2.3.1	(b) (4)	FR-02-039
TPP 2.4.1	(b) (4)	FR-02-001 FR-02-003 FR-02-004 FR-02-005 FR-02-006 FR-02-034 FR-02-035 FR-02-039 FR-02-059 FR-02-060 FR-03-001

TPP clause #	TPP description	Functional Requirement #
TPP 2.5.1	Holder visually indicates end of smoking time	FR-02-036 FR-02-038
TPP 2.8.2	Holder visually indicates preheating, smoking and end of smoking	FR-02-036 FR-02-038
TPP 2.8.3	(b) (4)	FR-02-042
TPP 2.8.4	Device visually indicates when self-clean is due soon.	FR-01-031 FR-02-009
TPP 2.8.5	Device performs self-clean when it is activated	FR-01-030 FR-02-012 FR-02-013 FR-02-014 FR-02-015 FR-02-016 FR-02-017
TPP 2.9.1	(b) (4)	FR-01-004 FR-01-005 FR-01-006 FR-01-008 FR-01-009 FR-01-035 FR-02-003 FR-03-001 FR-03-004 FR-03-007
TPP 2.10	Device autonomy allows for up to 20 Tobacco Sticks per day	FR-01-007
TPP 2.10.1	(b) (4)	FR-01-001 FR-01-002 FR-01-003 FR-01-054
TPP 2.10.2	Main Unit can be recharged using main adaptors, USB and car charger adaptors	FR-01-001 FR-01-002 FR-01-003 FR-01-014 FR-01-054

TPP clause #	TPP description	Functional Requirement #
TPP 2.11.1	(b) (4)	FR-01-043 FR-01-049 FR-02-047 FR-02-053 FR-03-006
TPP 3.1.1	Tobacco sticks should extend beyond in the holder by at least 20 mm	FR-02-041
TPP 3.1.2	Charger Max size 120x70x30mm; ≤ 200g; Holder can be easily held between index and middle fingers	FR-01-039 FR-01-040 FR-01-041 FR-01-042 FR-02-044 FR-02-045 FR-02-046
TPP 4.1.1	(b) (4)	FR-02-005 FR-02-006 FR-02-039
TPP 4.3.1	(b) (4)	FR-02-005 FR-02-006 FR-02-039 FR-02-058
TPP 4.5.2	Bill of materials, product design, indirect materials, manufacturing process and equipment are approved for use	FR-01-058 FR-02-064
TPP 4.6.1	Device self-cleaning emissions are not of toxicological concern	FR-02-014 FR-02-015 FR-02-016 FR-02-072
TPP 5.3.1	Compliance with market-specific labeling requirements	FR-01-073 FR-01-074 FR-02-075 FR-02-076
TPP 5.5.1	Compliance with Low Voltage Directive 2006/95/EC	FR-01-055 FR-02-065
TPP 5.5.2	Compliance with Electromagnetic Compatibility Directive 2004/108/EC	FR-01-050 FR-02-054

TPP clause #	TPP description	Functional Requirement #
TPP 5.5.3	Compliance with IEC 62133	TPP 5.5.1
TPP 5.5.4	Compliance with UN 38.3	TPP 5.5.1
TPP 5.6.1	Compliance with General Product Safety Directive (2001/95/EEC)	FR-01-047 FR-01-050 FR-01-055 FR-02-051 FR-02-054 FR-02-065
TPP 5.7.1	Compliance with the Waste Electrical and Electronic Equipment Directive (2002/96/EEC)	FR-01-073 FR-02-075
TPP 5.9.1	Compliance with Hazardous Materials Directive (2002/95/EC)	FR-01-052 FR-02-056
TPP 5.10.1	Compliance with Batteries and Battery Waste Directive (2006/66/EC)	FR-01-053 FR-02-057
TPP 6.1.2	(b) (4)	FR-01-044 FR-01-045 FR-02-048 FR-02-049
TPP 7.2.1	(b) (4)	FR-01-048 FR-02-052
TPP 7.4.1	(b) (4)	FR-01-014 FR-01-016 FR-01-017 FR-01-018 FR-01-019 FR-01-020 FR-02-026 FR-02-027 FR-02-028 FR-02-063 FR-03-002 FR-03-004

9 Review and approval

This document has been reviewed and approved by:

Name	Function	Justification	Date (dd-mm-yyyy)	Signature
Plojoux, Julien	Manager Product Design Verification	Signed as Author	14.07.2016	
Kapp, Florence	QA Officer	Signed as QA Reviewer	14.07.2016	
Scharer, Michael	Director Electronic Devices RRP	Signed as Approver	14/07/2016	