SSA-00185, 2.4GHz RF MCU U1 connects to 2 buttons and 2 LEDs via digital I/O pins for supporting up to 6 RF hand controllers binding and indication.

Thank you. Sincerely.		
By:	7.	Darren Nye
Sig	dature	Printed
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On behalf of :	Hornby Hobbies Ltd	
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## PC II Change request letter

Date: Nov 10, 2016

TO: Federal Communication Commission

FCC ID: 2ACUF-SSA00185

Product Name: Scalextric ARC Powerbase

Models: SSA-00186, SSA-00185

Please be notified that we <u>Hornby Hobbies Ltd</u> declare that the reasons for this Class II permissive change are as below:

Adding model: SSA-00186, The new model and original model differences as follows:

(Describe the difference between the product in original ID and current one.详细描述新产品和原来产品的差异。)

The model SSA-00186 Scalextric ARC PRO powerbase is the higher-grade version of model SSA-00185 Scalextric ARC AIR powerbase. Both models are slot car controller, working with SSA-00189/SSA-00190 2.4GHz RF hand controllers for slot car control, and sending lap counting signal to smart device by Blue tooth 4.0.

## Differences in functionality:

- 1. SSA-00186 supports additional digital car control. User can select digital car control or analogue car control by a switch. SSA-00186 can support up to 6 digital cars or 2 analogue cars.
  - SSA-00185 supports 2 analogue cars control only.
- 2. SSA-00186 supports up to six 2.4GHz RF hand controllers. SSA-00185 supports up to two 2.4GHz RF hand controllers.

## Differences in circuit:

- 1. There is not any difference in BLE part because both SSA-00186 and SSA-00185 are using same BLE module, and the BLE module position and orientation are identical on the PCB.
- 2. In SSA-00186, the BLE connects to U5 MCU via SPI bus to provide PWM signal to H-bridge PWM driver to power the track. In SSA-00185, the BLE provides PWM signal directly to PWM driver to power the track.
- 3. In SSA-00186, U5 MCU connects to track sensors and picks up the sensor status to BLE module via SPI. In SSA-00185, the BLE module connects to track sensors and picks up the sensor status directly via digital I/O pins.
- 4. There is no difference in 2.4GHz RF circuit (U1 in SSA-00186, U2 in SSA-00185). The RF components of SSA-00186 and SSA-00185 are identical. The circuit position and orientation are identical on the PCB.
- 5. In SSA-00186, 2.4GHz RF MCU U1 connects to 6 buttons and 6 LEDs via digital I/O pins for supporting up to 6 RF hand controllers binding and indication. In