

Engine ECU : Keihin (Honda Motorcycle & Scooter India Pvt. Ltd. Activa) PCB Circuit Analysis Report

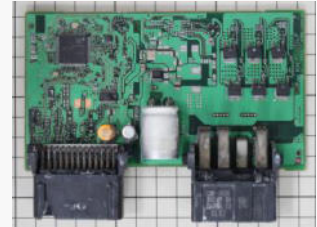


HMSI Activa125 (from WEB info)

<https://www.honda2wheelersindia.com/activa125-BS-VI/specifications>



Overview of ECU with ACG starters



PCB

Overview

Activa series is the scooter made by Honda's Indian motorcycle manufacturing and sales subsidiary, Honda Motorcycle & Scooter India Pvt. Ltd. (HMSI). HMSI is the largest manufacturer of scooters in India. Activa series are the majority of the scooters produced here.

This is the analysis report of the PCB in ECU with ACG starters installed in Activa125.

Product features

- Made by Hitachi Astemo (formerly Keihin)
- Engine: Power 5.77kW (max.), Torque 8.90Nm (max.)
- Issues commands to each device, such as fuel injection volume and ignition timing.
- Compatible with idling stop systems
- Integrated AC generator (ACG) control
- PCB Size: (W)139mm x (L)80mm x (t) 1.8mm,

Number of layer: 6, Number of component: 351

Activa125 specs

Vehicle weight (kg)	110
Number of passengers	2
Engine Type	4 Stroke
Maximum Power (kW/rpm)	6.11/6250
Max. Torque (Nm/rpm)	10.4/5000
Fuel system	PGM-FI

Report Contents (42 pages)

- Product teardown, parts measurement (size & weight)
- Identification of key ICs on the PCB (including datasheet, if we found).
- PCB circuit Diagram, Block Diagram

Report price

Delivery one week after order placement

Please contact us for report pricing

Table of Contents

			Page
<u>Summary</u>			
Table 1	Product Overview	...	3
<u>PCB Overview</u>			
Table 2	PCB Overview	...	4
<u>Overview</u>			
Fig. 1	Product Overview	...	13
Fig. 2	Product Marking	...	14
Fig. 3-1	Teardown 1	...	15
Fig. 3-2	Teardown 2	...	16
Fig. 4	PCB Overview	...	17
Fig. 5	PCB X-Ray	...	18
Fig. 6	PCB Overview (Parts Removed)	...	19
Fig. 7-1	Layer View L1 (Top View)	...	20
Fig. 7-2	Layer View L2 (Top View)	...	20
Fig. 7-3	Layer View L3 (Top View)	...	20
Fig. 7-4	Layer View L4 (Top View)	...	20
Fig. 7-5	Layer View L5 (Top View)	...	21
Fig. 7-6	Layer View L6 (Top View)	...	21
<u>Parts Location</u>			
Fig. 8-1	Parts Location (Top View)	...	22
Fig. 8-2	Parts Location (Bottom View)	...	23
<u>Elements</u>			
Table 3	Number of mounted parts	...	24
Fig. 9-1	Elements 1	...	24
Fig. 9-2	Elements 2	...	25
Fig. 9-3	Elements 3	...	26
<u>Interface</u>			
Fig. 10-1	Connector 1	...	27
Fig. 10-2	Connector 2	...	28
<u>Sensor</u>			
Fig. 11	Sensor Location	...	29
<u>Circuit</u>			
Fig. A-1	Block Diagram	...	A-1
Fig. A-2	Schematic	...	A-2
<u>Parts information</u>			
Table B	Parts List	...	B-1
<u>Metal shield</u>			
Fig. C-1	Metal Shield Overview	...	C-1
Fig. C-2	Metal Shield - PCB Contact Area	...	C-2

