NEW RELEASE

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Inverter: Viridi E-Mobility Technology (VOLVO EX30)

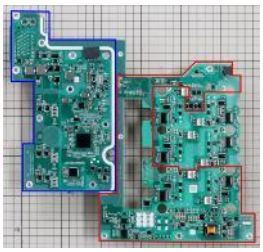
- **Control Section Circuit Analysis Report**
- **Driver Section Circuit Analysis Report**



(Source) https://www.VOLVOcars.com/jp/cars/ex30-electric/



Inverter Unit



Inverter PCB
Control Section
Driver Section

Report Overview

In November 2023, Volvo unveiled the EX30 in Europe, its smallest fully electric SUV to date. The Volvo EX30 is available in three trim levels: Core (RWD), Plus (RWD), and Ultra (4WD). This report presents a circuit analysis of the control and driver sections of the front inverter manufactured by Viridi E-Mobility Technology for the Volvo EX30 Ultra.

Product Specifications

- Front inverter manufactured by Viridi E-Mobility Technology for the Volvo EX30 Ultra
- Maximum motor output: 115 kW
- NMC lithium-ion battery: 107 cells, 392 V, 69 kWh
- Infineon MCU and gate-driver ICs
- Distributed power-supply architecture for the gate-driver circuits
- Silan IGBT modules used as the power modules

Note: Structural analysis has been performed on 24G-0070-2,3

Report Contents

1. Control Section Circuit Analysis Report (25G-0065-1)
2. Driver Section Circuit Analysis Report (25G-0065-2)
   - Product teardown and PCB-mounted component analysis
     (component dimensions and weights are not included)
   - PCB trace layout for each layer and circuit connectivity information (netlist and viewer tool)
   - Circuit schematic and block diagram

Note: Component analysis, circuit connectivity information, circuit schematics, and block diagrams are provided only for the respective analysis areas.

Report Pricing

Delivery: approximately one week after order placement. Please contact us for pricing.

Report No : 25G-0065-1,2 Release day : 2025.8.22

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Control Section Circuit Analysis Report (25G-0065-1)

Table of Contents

			Page
Summary			
Table 1	Product Overview	...	3
PCB Overview			
Table 2	PCB Overview	...	4
Overview			
Fig. 1-1	e-Axle Exterior View	...	10
Fig. 1-2	Inverter Unit Exterior View	...	11
Fig. 2-1	Product Label (e-Axle)	...	12
Fig. 2-2	Product Label (Inverter Unit)	...	13
Fig. 3-1	e-Axle Teardown	...	14
Fig. 3-2	Inverter Unit Teardown	...	15
Fig. 4	Inverter PCB Exterior View	...	16
Fig. 5	Inverter PCB X-Ray Image	...	17
Fig. 6	Inverter PCB Exterior View (After Component Removal)	...	18
Fig. 7-1	Layer Image: L1 (Top View)	...	19
Fig. 7-2	Layer Image: L2 (Top View)	...	19
Fig. 7-3	Layer Image: L3 (Top View)	...	20
Fig. 7-4	Layer Image: L4 (Top View)	...	20
Fig. 7-5	Layer Image: L5 (Top View)	...	21
Fig. 7-6	Layer Image: L6 (Top View)	...	21
Analysis Area			
Fig. 8	Analysis Area	...	22
Component Locations			
Fig. 9-1-1	Control Section Component Locations (Top View) 1	...	23
Fig. 9-1-2	Control Section Component Locations (Top View) 2	...	24
Fig. 9-2-1	Control Section Component Locations (Bottom View) 1	...	25
Fig. 9-2-2	Control Section Component Locations (Bottom View) 2	...	26
Components			
Table 3	Control Section Component Count	...	27
Fig. 10-1	Control Section Components 1	...	27
Fig. 10-2	Control Section Components 2	...	28
Fig. 10-3	Control Section Components 3	...	29
Fig. 10-4	Control Section Components 4	...	30
Interface			
Fig. 11-1	Control Section Connector 1	...	31
Fig. 11-2	Control Section Connector 2	...	32
Sensor			
Fig. 12	Control Section Sensor Location	...	33
Circuit			
Fig. A-1	Block Diagram	...	A-1
Fig. A-2	Schematic	...	A-2
Component Information			
Table B	Control Section Parts List	...	B-1

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Driver Section Circuit Analysis Report (25G-0065-2)

Table of Contents

			Page
Summary			
Table 1	Product Overview	...	3
PCB Overview			
Table 2	PCB Overview	...	4
Overview			
Fig. 1-1	e-Axle Exterior View	...	9
Fig. 1-2	Inverter Unit Exterior View	...	10
Fig. 2-1	Product Label (e-Axle)	...	11
Fig. 2-2	Product Label (Inverter Unit)	...	12
Fig. 3-1	e-Axle Teardown	...	13
Fig. 3-2	Inverter Unit Teardown	...	14
Fig. 4	Inverter PCB Exterior View	...	15
Fig. 5	Inverter PCB X-Ray Image	...	16
Fig. 6	Inverter PCB Exterior View (After Component Removal)	...	17
Fig. 7-1	Layer Image: L1 (Top View)	...	18
Fig. 7-2	Layer Image: L2 (Top View)	...	18
Fig. 7-3	Layer Image: L3 (Top View)	...	19
Fig. 7-4	Layer Image: L4 (Top View)	...	19
Fig. 7-5	Layer Image: L5 (Top View)	...	20
Fig. 7-6	Layer Image: L6 (Top View)	...	20
Analysis Area			
Fig. 8	Analysis Area	...	21
Component Locations			
Fig. 9-1-1	Driver Section Component Locations (Top View) 1	...	22
Fig. 9-1-2	Driver Section Component Locations (Top View) 2	...	23
Fig. 9-1-3	Driver Section Component Locations (Top View) 3	...	24
Fig. 9-2-1	Driver Section Component Locations (Bottom View) 1	...	25
Fig. 9-2-2	Driver Section Component Locations (Bottom View) 2	...	26
Fig. 9-2-3	Driver Section Component Locations (Bottom View) 3	...	27
Fig. 9-2-4	Driver Section Component Locations (Bottom View) 4	...	28
Components			
Table 3	Driver Section Component Count	...	29
Fig. 10-1	Driver Section Components 1	...	29
Fig. 10-2	Driver Section Components 2	...	30
Fig. 10-3	Driver Section Components 3	...	31
Interface			
Fig. 11-1	Driver Section Connector 1	...	32
Fig. 11-2	Driver Section Connector 2	...	33
Sensor			
Fig. 12	Driver Section Sensor Location	...	34
Circuit			
Fig. A-1	Block Diagram	...	A-1
Fig. A-2	Schematic	...	A-2
Component Information			
Table B	Driver Section Parts List	...	B-1

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