

Date: 10/01/01	<i>Tally Computerdrucker GmbH</i>
Name: Rolf Winterhalder/TEE	
File: 172169	

Significant design elements for EMC
FCC ID: EUIT2x40

Matrix Printer Models
T2145, T2145S, T2245, T2255

1. Generated Frequencies:

1.1 Power-Supply BG 48473

Kind	Part Nb.	Frequency	Remarks
Clock	IC3	80kHz	Clock for PWM

1.2 Control-Board PCB 48491A

Kind	Part Nb.	Frequency	Remarks
Clock	G1	15,9744MHz	Clock Processor IC6
Clock	IC16	approx 150kHz	5V DC-DC-Converter
Clock	IC2, IC3	approx. 250kHz	supply for RS232 Interface
Clock	IC12	approx 8kHz	Horizontal Motor Driver
Clock	IC13, IC14	approx 16kHz	Vertical Motor Driver
Clock	IC15	approx 22kHz	Printhead Distance Motor Driver
Clock	VA1-VA6	approx 1,8kHz	Needle Driver

1.3 Panel: BG 47809, PCB 47807 index a or higher.

Clock	approx. 280kHz	Clock IC4
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2. List of Components used for EMI suppression

2.1 Power-Supply BG 48473

Part	Value	Name	Ident.-Nr	Manufacturer
X-Capacitor	220nF	C18, C15	708512	see attached
Y-Capacitor	2,2nF	C33, C34	709710	see attached
Choke	2X10mF	L2	710225	see attached
Y1-Capacitor	4,7nF	C16 or C35	711411 or 710393	see attached

2.2 Control-Board BG 48491

Part	Value	Name	Ident.-Nr	Manufacturer
Resistor	100 Ohm	RA1, RA3, RA5-9, RA16, RA17, RA19	710213	see attached
Capacitor	330pF	C10, C43, C50-52, C56, C61	710331	see attached
Capacitor	330pF	C32-33	710877	see attached
Capacitor	68pF	C8-9, C16, C18, C35, C78, C111, C120-121	710209	see attached
Resistor	100 Ohm	R14, R24, R34, R40, R47, R58, R86	709995	see attached
PCB	4 Layers Multilayer		48491A	

3. Constructive measures:

3.1

The Case of the Control- Board is connected to earth by a copper ribbon Id. Nr. 060284

3.2

A ferrite core (710242) is placed at the mains input (Id. Nr: 047892)

3.3

A ferrite core (710242) is placed at the connection from power supply to control-board near the connector of power supply (Id. Nr: 048473)