





## Absolute Maximum Ratings

Parameter	Symbol	Value	Unit	Remark
DC Input Voltage	Vin	20	V	-
Disable Input Voltage	Vc	20	V	-
Output Current	Io	0.5	A	-
Power Dissipation	Pd	1.5	W	No Heatsink
Junction Temperature	Tj	+ 150	°C	-
Operating Temperature	Topr	0 ~ +125	°C	-

## Electrical Characteristics

(Refer to test circuit Vin1=6V , Vin2=10.5V , Tj = +25 ° C, unless otherwise specified)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Output Voltage 1	Vo1	Io1=10mA 6V<Vin1<14V 5mA<Io1<500mA	3.22 3.14	3.3 3.3	3.38 3.46	V
Output Voltage 2	Vo2	Io2=10mA 10.5V<Vin2<18V 5mA<Io2<500mA	7.84 7.7	8 8	8.16 8.3	V
Dropout Output Voltage 1,2	Vd1,2	Io1,2= 500mA	-	-	2.5	V
Line Regulation 1,2	ΔVo 1,2	6V < Vin1 < 14V 10.5V < Vin2 < 18V Io 1,2 = 200mA	-	-	40 80	mB
Load Regulation 1,2	ΔVo 1,2	5mA < Io1 < 500mA 5mA < Io1 < 500mA	-	0.1	70 160	mB
Output Voltage 3	Vo3	Vsys=7V, Io3=100mA	4.97	5.1	5.23	V
Line Regulation 3	ΔVo3	13V < Vin2 < 18V Io3 = 100mA	-	-	50	mB
Load Regulation 3	ΔVo3	5mA < Io3 < 1A	-	-	110	mB
Reset Pulse Delay	Trd	Cd=100nF, Note1	-	25	-	ms
Saturation Voltage in Reset Condition	VrL	I6=5mA	-	-	0.4	V
Leakage Current at Pin 6	IrH	V6=10V	-	-	10	μA
Output Voltage Thermal Drift	STt	0.°C < Tj < +125 °C , Note 2	-	100	-	ppm/°C
Short Circuit Output Current	Isc1,2	Vin1=6V , Vin2 =10.5V	-	-	1.6	A
Disable Voltage High	VdisH	Output 2 Active	2.0	-	-	V
Disable Voltage Low	VdisL	Output 2 Disabled	-	-	0.8	V
Disable Bias Current	Idis	0B < Vdis < 7V	-100	-	2	μA
Junction Temperature for TSD	Ttsd	Note 2	-	145	-	°C
Quiescent Current	Iq	Io1 = 10A, Output 2 Disabled	-	-	2	mA
Reset Threshold Voltage	Vr	K=Vo1	K-0.4	K-0.25	K-0.1	V
Reset Threshold Hysteresis	Vrth	Note 1	20	50	100	mA

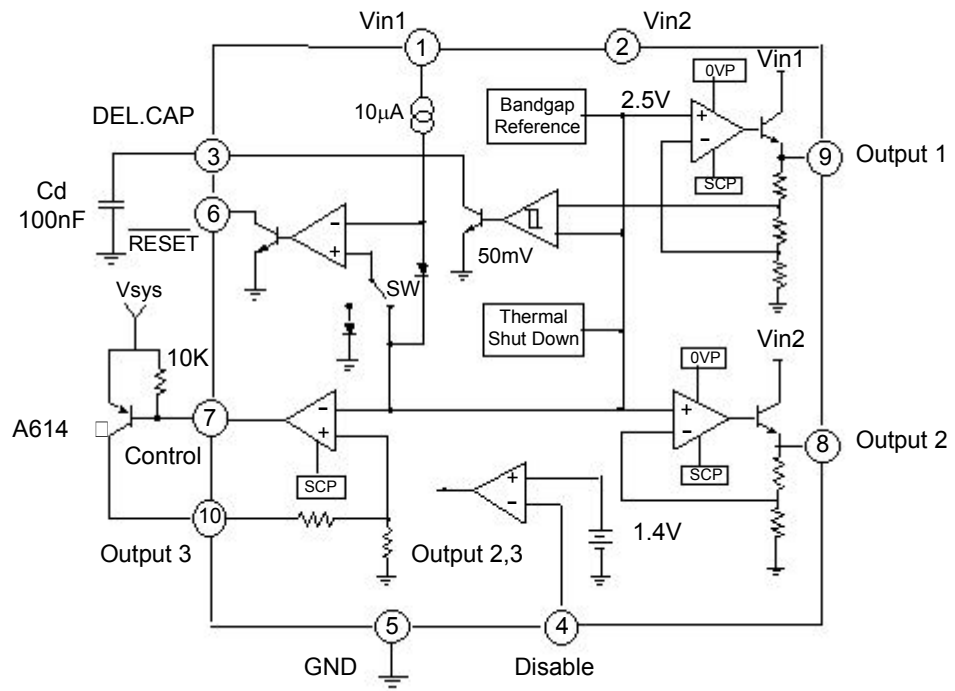
### Notes:

- To check the reset circuit, the reset output is low to discharge the delay capacitor(=Cd). if it's less than Vo1-0.25V. And the reset output is high when the delay capacitor voltage linearly increased by the internal current source(10 . A) if it's more than Vo1- 0.2V. The equations of delay time is same as below. Trd = (Cd x 2.5) / 10 μA
- These parameters, although guaranteed, are not 100% tested in production.

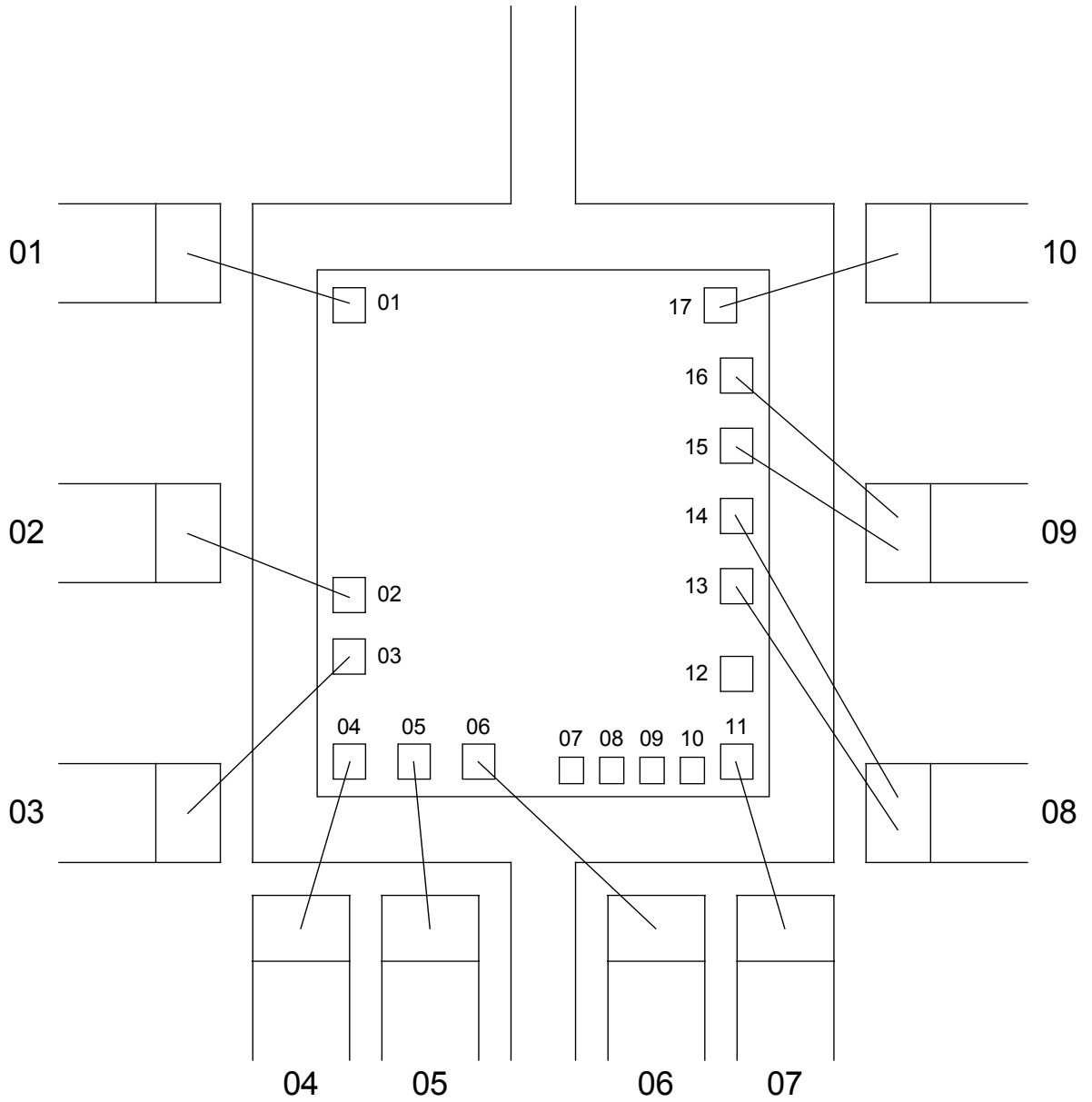


# FMR7632 500mA 20V Fixed Multi-Output Regulator

## Internal Block Diagram

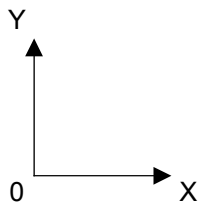
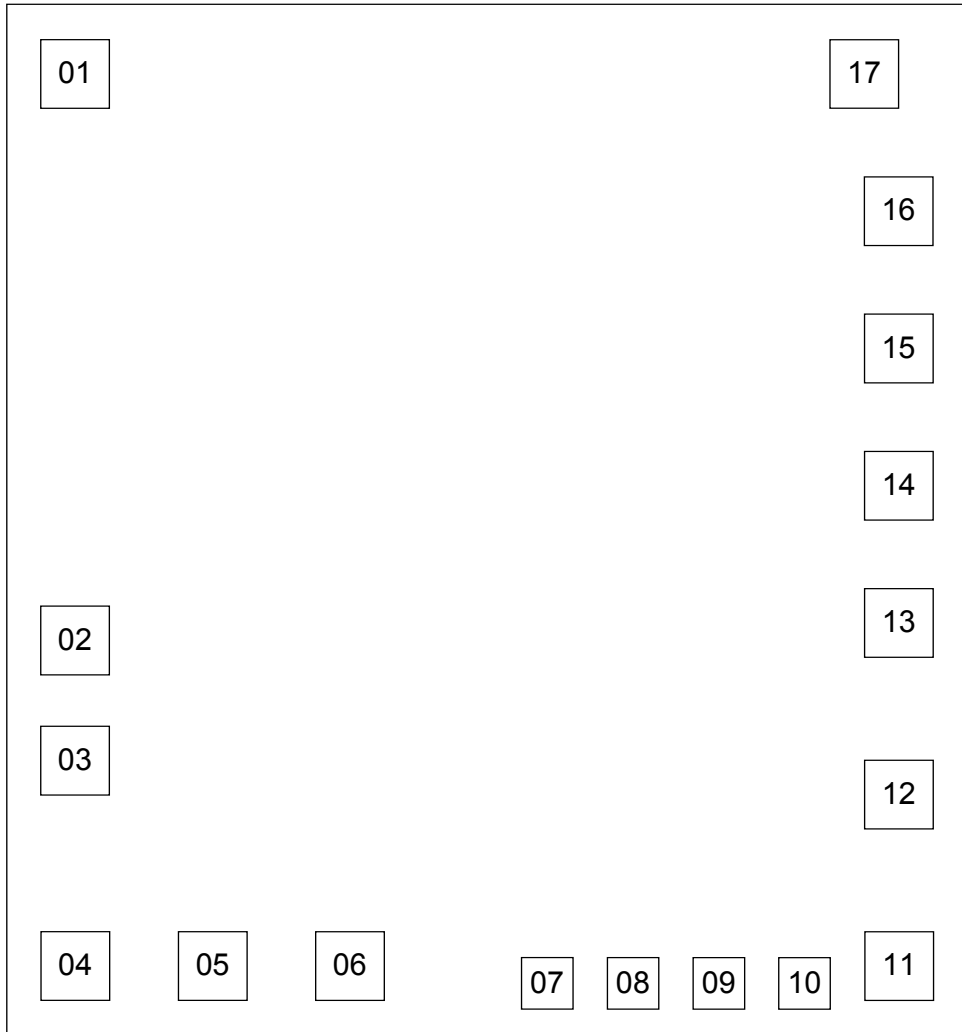


**Bonding diagram of FMR7632**





### Pads location of FMR7632



Die size  $X_r = 2.22$  mm,  $Y_r = 2.57$  mm.



## FMR7632 500mA 20V Fixed Multi-Output Regulator

No. of pad	Coordinates (left bottom corner), mm		Pad size, mm
	X	Y	
01	0,142	2,347	0,115×0,115
02	0,142	1,024	0,115×0,115
03	0,138	0,703	0,115×0,115
04	0,138	0,148	0,115×0,115
05	0,483	0,148	0,115×0,115
06	0,860	0,163	0,115×0,115
07*	1,328	0,151	0,074×0,074
08*	1,448	0,151	0,074×0,074
09*	1,648	0,151	0,074×0,074
10*	1,808	0,151	0,074×0,074
11	1,972	0,133	0,115×0,115
12**	1,972	0,612	0,115×0,115
13	1,972	1,203	0,115×0,115
14	1,972	1,493	0,115×0,115
15	1,972	1,873	0,115×0,115
16	1,972	2,162	0,115×0,115
17	1,902	2,367	0,115×0,115

1. not for bonding, used just for the adjustment of the reference voltage
2. not for bonding, used to adjust the output reference voltage during probing