

12.10 Thermal Status Report and Fan Control

EC will control fan on/off function according to the CPU temperature (EC will get temperature from thermal sensor through SMBus). Fan will be off when temperature below speed 1 speed down temperature, and if temperature over EC Shutoff temperature five times, EC will auto turn off system to protect CPU.

The following table is detailed settings.

12.10.1 Fan control by Voltage

- EC will output voltage to control fan directly.
- DISCRETE CPU Fan control table. (TJ100/TJ105) / (TJ90/85) CPU

Speed stage	Speed down temperature(°C)	Speed up temperature(°C)	Fan 1 RPM
Speed 0	0	50	0
Speed 1	45	55	2800
Speed 2	52	60	3000
Speed 3	57	70	3200
Speed 4	67	80	3700
Speed 5	75	100/85	4000
Speed 6 (Throttling start)	95/78	105/90 (Shutdown temp)	4000

- DISCRETE VGA Fan control table.

Speed stage	Speed down temperature(°C)	Speed up temperature(°C)	Fan 1 RPM
Speed 0	--	--	--
Speed 1	--	--	--
Speed 2	--	--	--
Speed 3	--	--	--

Speed 4	--	85	--
Speed 5	65	94	4000
Speed 6 (Throttling start)	90	105 (Shutdown temp)	4000

- UMA CPU Fan control table. (TJ100/TJ105) / (TJ90/85) CPU

Speed stage	Speed down temperature(°C)	Speed up temperature(°C)	Fan 1 RPM
Speed 0	0	50	0
Speed 1	45	55	2800
Speed 2	52	60	3000
Speed 3	57	65	3200
Speed 4	62	80	3700
Speed 5	75	100/85	4000
Speed 6 (Throttling start)	95/78	105/90	4000

12.10.2 Fan control by PWM. (Not supported)

- EC will output PWM duty cycle to control fan directly.

Speed stage	Speed down temperature(°C)	Speed up temperature(°C)	Fan 1 Duty Cycle
Speed 0	0	50	0
Speed 1	46	60	50%
Speed 2	55	65	65%
Speed 3	60	70	72%
Speed 4	65	101	82%
Speed 5 (Throttling start)	90	104 (Shutdown temp)	100%