Electrical Characteristics over recommended operating free-air temperature range (unless otherwise noted)

Parameter		Conditions	DM54 60			Conditions	DM74 60			Units
			Min	Typ (1)	Max		Min	Typ (1)	Max	
V_{IH}	High Level Input Voltage		2				2			V
V_{IL}	Low Level Input Voltage				0.8				0.8	V
$V_{\overline{X}X(ON)}$	On-State Voltage Between Expander Outputs	V_{CC} = 4.5 V, V_{IH} = 2 V, V_X = 1.1 V, $I_{\overline{X}}$ = 3.5 mA, T_A = −55°C			0.4	V_{CC} = 4.75 V, V_{IH} = 2 V, V_X = 1 V, $I_{\overline{X}}$ = 3.5 mA, T_A = 0°C			0.4	V
$I_{X(ON)}$	On-State Expander Current	V_{CC} = 4.5 V, V_{IH} = 2 V, V_X = 1.1 V, $I_{\overline{X}}$ = 0, T_A = −55°C	−0.3			V_{CC} = 4.75 V, V_{IH} = 2 V, V_X = 1 V, $I_{\overline{X}}$ = 0, T_A = 0°C	−0.43			mA
$I_{\overline{X}(OFF)}$	Off-State Expander Current	V_{CC} = 4.5 V, V_{IL} = 0.8 V, $V_{\overline{X}}$ = 4.5 V, R_X = 1.2 kΩ, T_A = −55°C			150	V_{CC} = 4.75 V, V_{IL} = 0.8 V, $V_{\overline{X}}$ = 4.5 V, R_X = 1.2 kΩ, T_A = 0°C			270	μA
I_I	Input Current at Maximum Input Voltage	V_{CC} = 5.5 V, V_I = 5.5 V			1	V_{CC} = 5.25 V, V_I = 5.5 V			1	mA
I_{IH}	High Level Input Current	V_{CC} = 5.5 V, V_I = 2.4 V			40	V_{CC} = 5.25 V, V_I = 2.4 V			40	μA
I_{IL}	Low Level Input Current	V_{CC} = 5.5 V, V_I = 0.4 V			−1.6	V_{CC} = 5.25 V, V_I = 0.4 V			−1.6	mA
$I_{CC(ON)}$	Supply Current, Expander On	V_{CC} = 5.5 V, V_I = 4.5 V, V_X = 0.85 V, $I_{\overline{X}}$ = 0		1.2	2.5	V_{CC} = 5.25 V, V_I = 4.5 V, V_X = 0.85 V, $I_{\overline{X}}$ = 0		1.2	2.5	mA
$I_{CC(OFF)}$	Supply Current, Expander Off	V_{CC} = 5.5 V, V_I = 0, V_X = 0.85 V, $I_{\overline{X}}$ = 0		2	4	V_{CC} = 5.25 V, V_I = 0, V_X = 0.85 V, $I_{\overline{X}}$ = 0		2	4	mA

Note 1: All typical values are at V_{CC} = 5 V, T_A = 25°C.