Submission 7

7.1.2

Time	,	10 sec	20 sec	30 sec 4	0 sec 50	sec 60	sec 70	sec 80	sec 90	sec 100
i_clk=1										
i_k[2:0] =100	100									
i_reset =0										
m_count[2:0] =010	.000	001	010	011	000	001	010	011	000	001
o_roll_over=0										

7.2.2



7.2.3

50 MHz clock input

7.2.4

2 Rollovers für einen Clock-Zyklus

Konvertieren von a nach b

a / b = 2 * Anzahl Rollovers (2 Rollovers = 1 Zyklus in B)

a/b = 2 * k

k = a/(2*b)

 $a = 50 * 10^6 Hz$

 $b = 10 \text{ Hz: } k_10 = 50 * 10^6 / (2 * 10) = 2.5 * 10^6$

 $b = 1 Hz : k_1 = 50 * 10^6 / (2 * 1) = 25 * 10^6$

 $b = 0.1 \text{ Hz} : k_0_1 = 50 * 10^6 / (2 * 0.1) = 250 * 10^6$