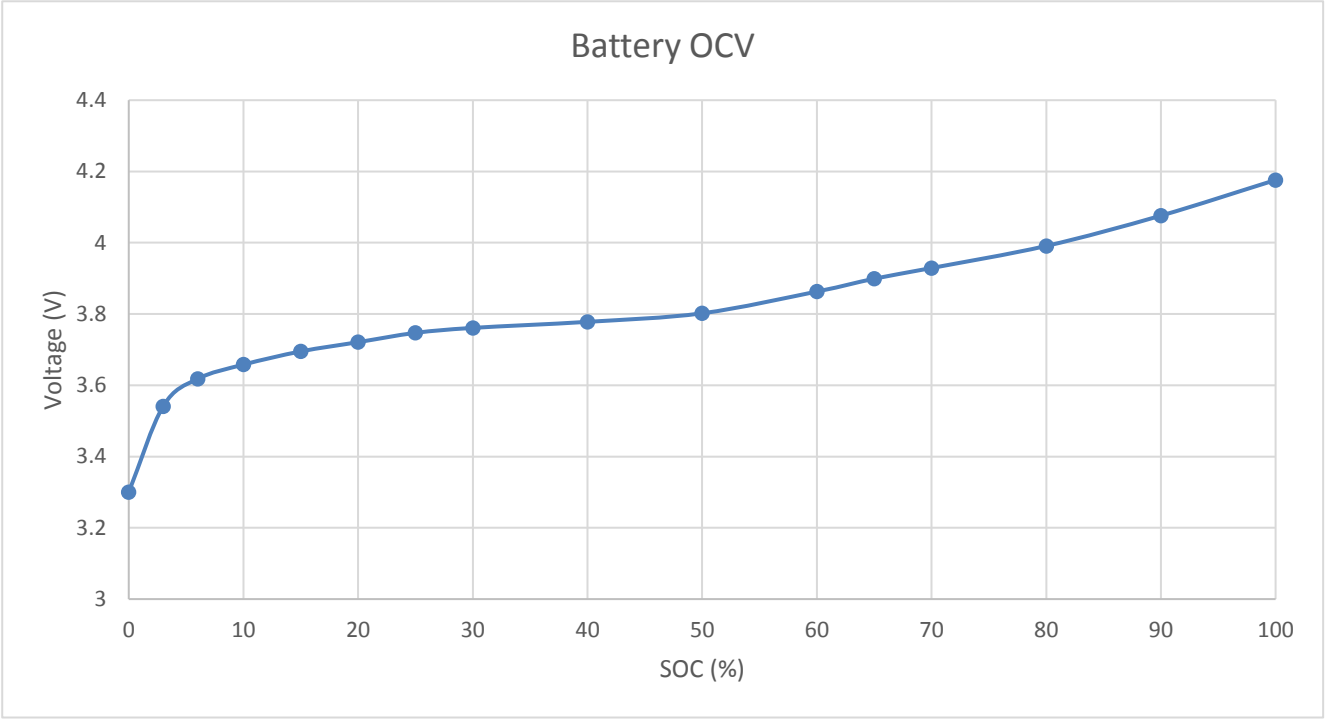**STC3117 OCV registers:**
How to fill the STC3117 registers depending on battery characteristics

• Example for a 3.7V battery (4.2V max charge voltage)

register Address	SOC (%)	register REG_SOCTAB		register Address	corresponding SOC (%)	Default OCV curve voltage (V) STC3117 (4.2V max battery)	register REG_OCVTAB Value	
		Dec (0.5%)	Hex (0.5%)				Dec (0.55 mV)	Hex (0.55 mV)
0x50	0	0	00	0x30, 0x31	0	3.3	6000	176F
0x51	3	1.5	01	0x32, 0x33	3	3.541	6438.181818	1926
0x52	6	3	03	0x34, 0x35	6	3.618	6578.181818	19B2
0x53	10	5	05	0x36, 0x37	10	3.658	6650.909091	19FA
0x54	15	7.5	07	0x38, 0x39	15	3.695	6718.181818	1A3E
0x55	20	10	0A	0x3A, 0x3B	20	3.721	6765.454545	1A6D
0x56	25	12.5	0C	0x3C, 0x3D	25	3.747	6812.727273	1A9C
0x57	30	15	0F	0x3E, 0x3F	30	3.761	6838.181818	1AB6
0x58	40	20	14	0x40, 0x41	40	3.778	6869.090909	1AD5
0x59	50	25	19	0x42, 0x43	50	3.802	6912.727273	1B00
0x5A	60	30	1E	0x44, 0x45	60	3.863	7023.636364	1B6F
0x5B	65	32.5	20	0x46, 0x47	65	3.899	7089.090909	1BB1
0x5C	70	35	23	0x48, 0x49	70	3.929	7143.636364	1BE7
0x5D	80	40	28	0x4A, 0x4B	80	3.991	7256.363636	1C58
0x5E	90	45	2D	0x4C, 0x4D	90	4.076	7410.909091	1CF2
0x5F	100	50	32	0x4E, 0x4F	100	4.176	7592.727273	1DA8

Battery OCV

• Example for a 3.8V battery (4.35V max):

register Address	SOC (%)	register REG_SOCTAB		register Address	corresponding SOC (%)	Default OCV curve voltage (V) STC3117 (4.35V max battery)	register REG_OCVTAB Value	
		Dec (0.5%)	Hex (0.5%)				Dec (0.55 mV)	Hex (0.55 mV)
0x50	0	0	00	0x30, 0x31	0	3.3	6000	176F
0x51	3	1.5	01	0x32, 0x33	3	3.571	6492.727273	195C
0x52	6	3	03	0x34, 0x35	6	3.651	6638.181818	19EE
0x53	10	5	05	0x36, 0x37	10	3.675	6681.818182	1A19
0x54	15	7.5	07	0x38, 0x39	15	3.71	6745.454545	1A59
0x55	20	10	0A	0x3A, 0x3B	20	3.743	6805.454545	1A95
0x56	25	12.5	0C	0x3C, 0x3D	25	3.761	6838.181818	1AB6
0x57	30	15	0F	0x3E, 0x3F	30	3.77	6854.545455	1AC6
0x58	40	20	14	0x40, 0x41	40	3.79	6890.909091	1AEA
0x59	50	25	19	0x42, 0x43	50	3.825	6954.545455	1B2A
0x5A	60	30	1E	0x44, 0x45	60	3.914	7116.363636	1BCC
0x5B	65	32.5	20	0x46, 0x47	65	3.953	7187.272727	1C13
0x5C	70	35	23	0x48, 0x49	70	3.99	7254.545455	1C56
0x5D	80	40	28	0x4A, 0x4B	80	4.088	7432.727273	1D08
0x5E	90	45	2D	0x4C, 0x4D	90	4.197	7630.909091	1DCE
0x5F	100	50	32	0x4E, 0x4F	100	4.313	7841.818182	1EA1

Battery OCV