

# **Map coding**

# Map coding

- Up to 256 screens. Screen numbers from 0 to 255
- Not all 256 screens has to be defined
- Rectangular shape
- Rectangular size is defined by setting T128\_SCREEN\_ROW\_1 parameter:
  - T128\_SCREEN\_ROW\_1=1 → 1 column by 256 rows
  - T128\_SCREEN\_ROW\_1=2 → 2 columns by 128 rows
  - T128\_SCREEN\_ROW\_1=4 → 4 columns by 64 rows
  - T128\_SCREEN\_ROW\_1=8 → 8 columns by 32 rows
  - T128\_SCREEN\_ROW\_1=16 → 16 columns by 16 rows
  - T128\_SCREEN\_ROW\_1=32 → 32 columns by 8 rows
  - T128\_SCREEN\_ROW\_1=64 → 64 columns by 4 rows
  - T128\_SCREEN\_ROW\_1=128 → 128 columns by 2 rows
  - T128\_SCREEN\_ROW\_1=0 → 256 columns by 1 row
- Screen number format: RRRRRRRR, or RRRRRRRC, or RRRRRRCC, etc. where R=Row and C=Column

# Map coding: example 1

- T128\_SCREEN\_ROW\_1 = 16
- Using only 144 screens out of 256

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
0	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
2	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47
3	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63
4	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79
5	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95
6	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111
7	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127
8	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143

- When Main Char gets out of current screen framework knows which screen is on the left, right, up and down
- Screens must be designed so that border screens do not allow moving out of the map

## Map coding: example 2

- T128\_SCREEN\_ROW\_1 = 8
- Using only 40 screens out of 256

	0	1	2	3	4	5	6	7
0	0	1	2	3	4	5	6	7
1	8	9	10	11	12	13	14	15
2	16	17	18	19	20	21	22	23
3	24	25	26	27	28	29	30	31
4	32	33	34	35	36	37	38	39