**Keypad Module:**

* **Configuration:**

|  |  |
| --- | --- |
| Name: | KEYPAD\_ROW\_1\_COL\_1\_KEY |
| Type: | Uint\_8 |
| Range: | 0:255 |
| Configuration Type: | define |
| Description: | Constains value of key in row 1 and column 1 |

|  |  |
| --- | --- |
| Name: | KEYPAD\_ROW\_1\_COL\_2\_KEY |
| Type: | Uint\_8 |
| Range: | 0:255 |
| Configuration Type: | define |
| Description: | Constains value of key in row 1 and column 2 |

|  |  |
| --- | --- |
| Name: | KEYPAD\_ROW\_1\_COL\_3\_KEY |
| Type: | Uint\_8 |
| Range: | 0:255 |
| Configuration Type: | define |
| Description: | Constains value of key in row 1 and column 3 |

|  |  |
| --- | --- |
| Name: | KEYPAD\_ROW\_1\_COL\_4\_KEY |
| Type: | Uint\_8 |
| Range: | 0:255 |
| Configuration Type: | Define |
| Description: | Constains value of key in row 1 and column 4 |

|  |  |
| --- | --- |
| Name: | KEYPAD\_ROW\_2\_COL\_1\_KEY |
| Type: | Uint\_8 |
| Range: | 0:255 |
| Configuration Type: | Define |
| Description: | Constains value of key in row 2 and column 1 |

|  |  |
| --- | --- |
| Name: | KEYPAD\_ROW\_2\_COL\_2\_KEY |
| Type: | Uint\_8 |
| Range: | 0:255 |
| Configuration Type: | define |
| Description: | Constains value of key in row 2 and column 2 |

|  |  |
| --- | --- |
| Name: | KEYPAD\_ROW\_2\_COL\_3\_KEY |
| Type: | Uint\_8 |
| Range: | 0:255 |
| Configuration Type: | define |
| Description: | Constains value of key in row 2 and column 3 |

|  |  |
| --- | --- |
| Name: | KEYPAD\_ROW\_2\_COL\_4\_KEY |
| Type: | Uint\_8 |
| Range: | 0:255 |
| Configuration Type: | define |
| Description: | Constains value of key in row 2 and column 4 |

|  |  |
| --- | --- |
| Name: | KEYPAD\_ROW\_3\_COL\_1\_KEY |
| Type: | Uint\_8 |
| Range: | 0:255 |
| Configuration Type: | define |
| Description: | Constains value of key in row 3 and column 1 |

|  |  |
| --- | --- |
| Name: | KEYPAD\_ROW\_3\_COL\_2\_KEY |
| Type: | Uint\_8 |
| Range: | 0:255 |
| Configuration Type: | define |
| Description: | Constains value of key in row 3 and column 2 |

|  |  |
| --- | --- |
| Name: | KEYPAD\_ROW\_3\_COL\_3\_KEY |
| Type: | Uint\_8 |
| Range: | 0:255 |
| Configuration Type: | Define |
| Description: | Constains value of key in row 3 and column 3 |

|  |  |
| --- | --- |
| Name: | KEYPAD\_ROW\_3\_COL\_4\_KEY |
| Type: | Uint\_8 |
| Range: | 0:255 |
| Configuration Type: | define |
| Description: | Constains value of key in row 3 and column 4 |

|  |  |
| --- | --- |
| Name: | KEYPAD\_ROW\_4\_COL\_1\_KEY |
| Type: | Uint\_8 |
| Range: | 0:255 |
| Configuration Type: | Define |
| Description: | Constains value of key in row 4 and column 1 |

|  |  |
| --- | --- |
| Name: | KEYPAD\_ROW\_4\_COL\_2\_KEY |
| Type: | Uint\_8 |
| Range: | 0:255 |
| Configuration Type: | define |
| Description: | Constains value of key in row 4 and column 2 |

|  |  |
| --- | --- |
| Name: | KEYPAD\_ROW\_4\_COL\_3\_KEY |
| Type: | Uint\_8 |
| Range: | 0:255 |
| Configuration Type: | define |
| Description: | Constains value of key in row 4 and column 3 |

|  |  |
| --- | --- |
| Name: | KEYPAD\_ROW\_4\_COL\_4\_KEY |
| Type: | Uint\_8 |
| Range: | 0:255 |
| Configuration Type: | Define |
| Description: | Constains value of key in row 4 and column 4 |

|  |  |
| --- | --- |
| Name: | KEYPAD\_NO\_KEY |
| Type: | Uint\_8 |
| Range: | 0:255 |
| Configuration Type: | Define |
| Description: | Constains default value if no key is pressed. |

|  |  |
| --- | --- |
| Name: | ROW\_1\_PIN |
| Type: | Uint\_8 |
| Range: | 0:255 |
| Configuration Type: | define |
| Description: | Constains gpio pin number connected to row 1 pin |

|  |  |
| --- | --- |
| Name: | ROW\_2\_PIN |
| Type: | Uint\_8 |
| Range: | 0:255 |
| Configuration Type: | define |
| Description: | Constains gpio pin number connected to row 2 pin |

|  |  |
| --- | --- |
| Name: | ROW\_3\_PIN |
| Type: | Uint\_8 |
| Range: | 0:255 |
| Configuration Type: | define |
| Description: | Constains gpio pin number connected to row 3 pin |

|  |  |
| --- | --- |
| Name: | ROW\_4\_PIN |
| Type: | Uint\_8 |
| Range: | 0:255 |
| Configuration Type: | define |
| Description: | Constains gpio pin number connected to row 4 pin |

|  |  |
| --- | --- |
| Name: | COL\_1\_PIN |
| Type: | Uint\_8 |
| Range: | 0:255 |
| Configuration Type: | define |
| Description: | Constains gpio pin number connected to column 1 pin |

|  |  |
| --- | --- |
| Name: | COL\_2\_PIN |
| Type: | Uint\_8 |
| Range: | 0:255 |
| Configuration Type: | define |
| Description: | Constains gpio pin number connected to column 2 pin |

|  |  |
| --- | --- |
| Name: | COL\_3\_PIN |
| Type: | Uint\_8 |
| Range: | 0:255 |
| Configuration Type: | Define |
| Description: | Constains gpio pin number connected to column 3 pin |

|  |  |
| --- | --- |
| Name: | COL\_4\_PIN |
| Type: | Uint\_8 |
| Range: | 0:255 |
| Configuration Type: | define |
| Description: | Constains gpio pin number connected to column 4 pin |

* **APIs:**

|  |  |  |
| --- | --- | --- |
| Function name | Keypad\_Init | |
| Arguments | Input | Not used |
| Output | Not used |
| Input/Output | Not used |
| Return | E\_OK | 0 |
| E\_NOK | 1 |
| Description | Initialize gpio pins (Synchronous function). | |

|  |  |  |
| --- | --- | --- |
| Function name | Keypad\_GetKey | |
| Arguments | Input | Not used |
| Output | Uint\_8\* const Pressed\_Key |
| Contains pressed key value |
| Input/Output | Not used |
| Return | E\_OK | 0 |
| E\_NOK | 1 |
| Description | Get pressed key from keypad, if any, otherwise output is no key.  This function should be triggered every 10 ms.  This function is synchronous function. | |