Memory Map

LOWER PAGE 0

All Bits in Lower Page 0 are Volatile. If the module is reset, the bit fields will return to their Default Values.

Lower Page 0: Register 0: Identifier, QSFP

Bit	Type	Function	Default
7	Read-Only	Reserved	0
6	Read-Only	Reserved	0
5	Read-Only	Reserved	0
4	Read-Only	Reserved	0
3	Read-Only	Reserved	1
2	Read-Only	Reserved	1
1	Read-Only	Reserved	0
0	Read-Only	Reserved	0

Lower Page 0: Register 1: Status Reserved

Bit	Type	Function	Default
7-0	Read-Only	Reserved	0

Lower Page 0: Register 2: Status

Bit	Type	Function	Default
7	Read-Only	Reserved	0
6	Read-Only	Reserved	0
5	Read-Only	Reserved	0
4	Read-Only	Reserved	0
3	Read-Only	Reserved	0
2	Read-Only	Reserved	0
1	Read-Only	IntL: Digital state of the IntL interrupt output pin.	0
0	Read-Only	Data_Not_Ready Indicates transceiver has not yet achieved power up and monitor data is not ready. Bit remains high until data is ready to be read at which time the device sets the bit low.	1

Lower Page 0: Register 3: Interrupt Status Tx and Rx LOS

Bit	Type	Function	Default
7	Read-Only	Tx4 LOS Latched TX LOS indicator, channel 4	0
6	Read-Only	Tx3 LOS Latched TX LOS indicator, channel 3	0
5	Read-Only	Tx2 LOS Latched TX LOS indicator, channel 2	0
4	Read-Only	Tx1 LOS Latched TX LOS indicator, channel 1	0
3	Read-Only	Rx4 LOS Latched RX LOS indicator, channel 4	0
2	Read-Only	Rx3 LOS Latched RX LOS indicator, channel 3	0
1	Read-Only	Rx2 LOS Latched RX LOS indicator, channel 2	0
0	Read-Only	Rx1 LOS Latched RX LOS indicator, channel 1	0

Lower Page 0: Register 4: TX Fault

Bit	Type	Function	Default
7	Read-Only	Reserved	0
6	Read-Only	Reserved	0
5	Read-Only	Reserved	0
4	Read-Only	Reserved	0
3	Read-Only	Tx4 Fault Latched TX fault indicator, channel 4	0
2	Read-Only	Tx3 Fault Latched TX fault indicator, channel 3	0
1	Read-Only	Tx2 Fault Latched TX fault indicator, channel 2	0
0	Read-Only	Tx1 Fault Latched TX fault indicator, channel 1	0

Lower Page 0: Register 5: Reserved

Bit	Type	Function	Default
7-0	Read-Only	Reserved	0

Lower Page 0: Register 6: Temperature Alarm

Bit	Type	Function	Default
7	Read-Only	Temp High Alarm Latched	0
6	Read-Only	Temp Low Alarm Latched	0
5	Read-Only	Temp High Warning Latched	0
4	Read-Only	Temp Low Warning Latched	0
3	Read-Only	Reserved	0
2	Read-Only	Reserved	0
1	Read-Only	Reserved	0
0	Read-Only	Reserved	0

Lower Page 0: Register 7: Vcc Alarm

Bit	Type	Function	Default
7	Read-Only	Vcc High Alarm Latched: high supply voltage alarm	0
6	Read-Only	Vcc Low Alarm Latched: low supply voltage alarm	0
5	Read-Only	Vcc High Warning Latched: high supply voltage warning	0
4	Read-Only	Vcc Low Warning Latched: low supply voltage warning	0
3	Read-Only	Reserved	0
2	Read-Only	Reserved	0
1	Read-Only	Reserved	0
0	Read-Only	Reserved	0

Lower Page 0: Register 8: Reserved

Bit	Type	Function	Default
7-0	Read-Only	Reserved	0

Lower Page 0: Register 9: Latched RX power alarm channel 1 and 2

Bit	Type	Function	Default
7	Read-Only	Rx1 Power High Alarm Latched channel 1	0
6	Read-Only	Rx1 Power Low Alarm Latched channel 1	0
5	Read-Only	Rx1 Power High Warning Latched channel 1	0
4	Read-Only	Rx2 Power High Alarm Latched channel 2	0
3	Read-Only	Rx1 Power Low Warning Latched channel 1	0
2	Read-Only	Rx2 Power Low Alarm Latched channel 2	0
1	Read-Only	Rx2 Power High Warning Latched channel 2	0
0	Read-Only	Rx2 Power Low Warning Latched channel 2	0

Lower Page 0: Register 10: Latched RX power alarm channel 3 and 4

Bit	Type	Function	Default
7	Read-Only	Rx3 Power High Alarm Latched channel 3	0
6	Read-Only	Rx3 Power Low Alarm Latched channel 3	0
5	Read-Only	Rx3 Power High Warning Latched channel 3	0
4	Read-Only	Rx3 Power Low Warning Latched channel 3	0
3	Read-Only	Rx4 Power High Alarm Latched channel 4	0
2	Read-Only	Rx4 Power Low Alarm Latched channel 4	0
1	Read-Only	Rx4 Power High Warning Latched channel 4	0
0	Read-Only	Rx4 Power Low Warning Latched channel 4	0

Lower Page 0: Register 11: Latched TX bias alarm channel 1 and 2

Bit	Type	Function	Default
7	Read-Only	Tx1 Bias High Alarm Latched channel 1	0
6	Read-Only	Tx1 Bias Low Alarm Latched channel 1	0
5	Read-Only	Tx1 Bias High Warning Latched channel 1	0
4	Read-Only	Tx1 Bias Low Warning Latched channel 1	0
3	Read-Only	Tx2 Bias High Alarm Latched channel 2	0
2	Read-Only	Tx2 Bias Low Alarm Latched channel 2	0
1	Read-Only	Tx2 Bias High Warning Latched channel 2	0
0	Read-Only	Tx2 Bias Low Warning channel 2	0

Lower Page 0: Register 12: Latched TX bias alarm channel 3 and 4

Bit	Type	Function	Default
7	Read-Only	Tx1 Bias High Alarm Latched channel 3	0
6	Read-Only	Tx1 Bias Low Alarm Latched channel 3	0
5	Read-Only	Tx1 Bias High Warning Latched channel 3	0
4	Read-Only	Tx1 Bias Low Warning Latched channel 3	0
3	Read-Only	Tx2 Bias High Alarm Latched channel 4	0
2	Read-Only	Tx2 Bias Low Alarm Latched channel 4	0
1	Read-Only	Tx2 Bias High Warning Latched channel 4	0
0	Read-Only	Tx2 Bias Low Warning channel 4	0

Lower Page 0: Register 13 through 21: Reserved

Bit	Type	Function	Default
7-0	Read-Only	Reserved	0

Lower Page 0: Register 22: DMI Temperature MSB internally measured module temperature

Transceiver Temperature is represented as a 16-bit twos complement value in increments of 1/256 degrees Celsius. Range is valid between -40C and +125C as per MSA. For AFBR-79Q4Z, the digital diagnostic accuracy is not guaranteed; for full digital diagnostic features, please see AFBR-79Q4Z-D device and documentation.

Bit	Type	Function	Default
7-0	Read-Only	DMI Temperature MSB	0

Lower Page 0: Register 23: DMI Temperature LSB internally measured module temperature

Bit	Type	Function	Default
7-0	Read-Only	DMI Temperature LSB	0

Lower Page 0: Register 24 and 25: Reserved

Bit	Type	Function	Default
7-0	Read-Only	Reserved	0

Lower Page 0: Register 26: Supply Voltage MSB Internally measured module supply voltage

Internally measured supply voltage is represented as a 16-bit unsigned integer in increments of 100 uVolts. For AFBR-79Q4Z, the digital diagnostic accuracy is not guaranteed; for full digital diagnostic features, please see AFBR-79Q4Z-D device and documentation.

Bit	Type	Function	Default
7-0	Read-Only	DMI Vcc MSB	0

Lower Page 0: Register 27: Supply Voltage LSB Internally measured module supply voltage

Bit	Type	Function	Default
7-0	Read-Only	DMI Vcc LSB	0

Lower Page 0: Register 28: Reserved

Bit	Type	Function	Default
7-0	Read-Only	Reserved DMI Vcc25 MSB	0

Lower Page 0: Register 29: Reserved

Bit	Type	Function	Default
7-0	Read-Only	Reserved DMI Vcc25 LSB	0

Lower Page 0: Register 30 through 33: Reserved

Bit	Type	Function	Default
7-0	Read-Only	Reserved	0

Lower Page 0: Register 34: Rx1 Power MSB, Internally measured RX input power, channel 1

RX received power is in mW average power (see default value = 1 in bit 3 of byte 220 in Upper Memory Page 00). Represented as a 16 bit unsigned integer with increments of 0.1uW. For AFBR-79Q4Z, the digital diagnostic accuracy is not guaranteed; for full digital diagnostic features, please see AFBR-79Q4Z-D device and documentation.

Bit	Type	Function	Default
7-0	Read-Only	RX1 power MSB	0

Lower Page 0: Register 35: Rx1 Power LSB, Internally measured RX input power, channel 1

Bit	Type	Function	Default
7-0	Read-Only	RX1 power LSB	0

Lower Page 0: Register 36: Rx2 Power MSB, Internally measured RX input power, channel 2

Bit	Type	Function	Default
7-0	Read-Only	RX2 power MSB	0

Lower Page 0: Register 37: Rx2 Power LSB, Internally measured RX input power, channel 2

Bit	Type	Function	Default
7-0	Read-Only	RX2 power LSB	0

Lower Page 0: Register 38: Rx3 Power MSB, Internally measured RX input power, channel 3

Bit	Type	Function	Default
7-0	Read-Only	RX3 power MSB	0

Lower Page 0: Register 39: Rx3 Power LSB, Internally measured RX input power, channel 3

Bit	Type	Function	Default
7-0	Read-Only	RX3 power LSB	0

Lower Page 0: Register 40: Rx4 Power MSB, Internally measured RX input power, channel 4

Bit	Type	Function	Default
7-0	Read-Only	RX4 power MSB	0

Lower Page 0: Register 41: Rx4 Power LSB, Internally measured RX input power, channel 4

Bit	Type	Function	Default
7-0	Read-Only	RX4 power LSB	0

Lower Page 0: Register 42: Tx1 Bias MSB, Internally measured TX bias, channel 1

TX bias current is in mA and is represented by a 16-bit unsigned integer in increments of 2uA. For AFBR-79Q4Z, the digital diagnostic accuracy is not guaranteed; for full digital diagnostic features, please see AFBR-79Q4Z-D device and documentation.

Bit	Type	Function	Default
7-0	Read-Only	TX1 bias MSB	0

Lower Page 0: Register 43: Tx1 Bias LSB, Internally measured TX bias, channel 1

Bit	Type	Function	Default
7-0	Read-Only	TX1 bias LSB	0

Lower Page 0: Register 44: Tx2 Bias MSB, Internally measured TX bias, channel 2

Bit	Type	Function	Default
7-0	Read-Only	TX2 bias MSB	0

Lower Page 0: Register 45: Tx2 Bias LSB, Internally measured TX bias, channel 2

Bit	Type	Function	Default
7-0	Read-Only	TX2 bias LSB	0

Lower Page 0: Register 46: Tx3 Bias MSB, Internally measured TX bias, channel 3

Bit	Type	Function	Default
7-0	Read-Only	TX3 bias MSB	0

Lower Page 0: Register 47: Tx3 Bias LSB, Internally measured TX bias, channel 3

Bit	Type	Function	Default
7-0	Read-Only	TX3 bias LSB	0

Lower Page 0: Register 48: Tx4 Bias MSB, Internally measured TX bias, channel 4

Bit	Type	Function	4p0
7-0	Read-Only	TX4 bias MSB	0

Lower Page 0: Register 49: Tx4 Bias LSB, Internally measured TX bias, channel 4

Bit	Type	Function	Default
7-0	Read-Only	TX4 bias LSB	0

Lower Page 0: Register 50: Tx1 Laser Output Power MSB

TX output power is in mW average power Represented as a 16 bit unsigned integer with increments of 0.1uW. This is an enhancement to the MSA and is a feature of this device. For AFBR-79Q4Z, the digital diagnostic accuracy is not guaranteed; for full digital diagnostic features, please see AFBR-79Q4Z-D device and documentation.

Bit	Type	Function	Default
7-0	Read-Only	Tx1 LOP MSB	0

Lower Page 0: Register 51: Tx1 Laser Output Power LSB

Bit	Type	Function	Default
7-0	Read-Only	Tx1 LOP LSB	0

Lower Page 0: Register 52: Tx2 Laser Output Power MSB

TX output power is in mW average power Represented as a 16 bit unsigned integer with increments of 0.1uW. This is an enhancement to the MSA and is a feature of this device. For AFBR-79Q4Z, the digital diagnostic accuracy is not guaranteed; for full digital diagnostic features, please see AFBR-79Q4Z-D device and documentation.

Bit	Type	Function	Default
7-0	Read-Only	Tx2 LOP MSB	0

Lower Page 0: Register 53: Tx2 Laser Output Power LSB

Bit	Type	Function	Default
7-0	Read-Only	Tx2 LOP LSB	0

Lower Page 0: Register 54: Tx3 Laser Output Power MSB

TX output power is in mW average power Represented as a 16 bit unsigned integer with increments of 0.1uW. This is an enhancement to the MSA and is a feature of this device. For AFBR-79Q4Z, the digital diagnostic accuracy is not guaranteed; for full digital diagnostic features, please see AFBR-79Q4Z-D device and documentation.

Bit	Type	Function	Default
7-0	Read-Only	Tx3 LOP MSB	0

Lower Page 0: Register 55: Tx3 Laser Output Power LSB

Bit	Type	Function	Default
7-0	Read-Only	Tx3 LOP LSB	0

Lower Page 0: Register 56: Tx4 Laser Output Power MSB

TX output power is in mW average power Represented as a 16 bit unsigned integer with increments of 0.1uW. This is an enhancement to the MSA and is a feature of this device. For AFBR-79Q4Z, the digital diagnostic accuracy is not guaranteed; for full digital diagnostic features, please see AFBR-79Q4Z-D device and documentation.

Bit	Type	Function	Default
7-0	Read-Only	Tx4 LOP MSB	0

Lower Page 0: Register 57: Tx4 Laser Output Power LSB

Bit	Type	Function	Default
7-0	Read-Only	Reserved Tx4 LOP LSB	0

Lower Page 0: Register 58 through 81: Reserved

Bit	Type	Function	Default
7-0	Read-Only	Reserved	0

Lower Page 0: Register 82: Reserved

Bit	Type	Function	Default
7-0	Read-Only	Reserved Power On time MSB	0

Lower Page 0: Register 83: Reserved

Bit	Type	Function	Default
7-0	Read-Only	Reserved Power On time LSB	0

Lower Page 0: Register 84: Reserved

Bit	Type	Function	Default
7-0	Read-Only	Reserved Temperature ADC MSB	0

Lower Page 0: Register 85: Reserved

Bit	Type	Function	Default
7-0	Read-Only	Reserved Temperature ADC LSB	0

Lower Page 0: Register 86: Individual channel enable/disable

Bit	Type	Function	Default
7	Read-Only	Reserved	0
6	Read-Only	Reserved	0
5	Read-Only	Reserved	0
4	Read-Only	Reserved	0
3	Read/Write	Tx4_Disable bit that allows software disable of transmitters. Writing "1" disables the laser of the channel.	0
2	Read/Write	Tx3_Disable that allows software disable of transmitters. Writing "1" disables the laser of the channel.	0
1	Read/Write	Tx2_Disable that allows software disable of transmitters. Writing "1" disables the laser of the channel.	0
0	Read/Write	Tx1_Disable that allows software disable of transmitters. Writing "1" disables the laser of the channel.	0

Lower Page 0: Register 87: Reserved

Bit	Type	Function	Default
7-0	Read/Write	Not Supported	0

Lower Page 0: Register 88: Reserved

Bit	Type	Function	Default
7-0	Read/Write	Not Supported	0

Lower Page 0: Register 89: Reserved

Bit	Type	Function	Default
7-0	Read/Write	Not Supported	0

Lower Page 0: Register 90: Reserved

Bit	Type	Function	Default
7-0	Read/Write	Not Supported	0

Lower Page 0: Register 91: Reserved

Bit	Type	Function	Default
7-0	Read/Write	Not Supported	0

Lower Page 0: Register 92: Reserved

Bit	Type	Function	Default
7-0	Read/Write	Not Supported	0

Lower Page 0: Register 93: Low Power Mode

Bit	Type	Function	Default
7	Read-Only	Reserved	0
6	Read-Only	Reserved	0
5	Read-Only	Reserved	0
4	Read-Only	Reserved	0
3	Read-Only	Reserved	0
2	Read-Only	Reserved	0
1	Read/Write	Power set to low power mode. "1' sets to LP mode	0
0	Read/Write	Power_over-ride, "1" overrides LP Mode signal; "0" allows setting power mode with software	1

Lower Page 0: Register 94: Reserved

Bit	Type	Function	Default
7-0	Read/Write	Not Supported	0

Lower Page 0: Register 95: Reserved

Bit	Type	Function	Default
7-0	Read/Write	Not Supported	0

Lower Page 0: Register 96: Reserved

Bit	Type	Function	Default
7-0	Read/Write	Not Supported	0

Lower Page 0: Register 97: Reserved

Bit	Type	Function	Default
7-0	Read/Write	Not Supported	0

Lower Page 0: Register 98: Reserved

Bit	Type	Function	Default
7-0	Read-Only	Reserved	0

Lower Page 0: Register 99: Reserved

Bit	Type	Function	Default
7-0	Read-Only	Reserved Engineering mode command	0

Lower Page 0: Register 100: TX and RX LOS interrupt masking bits

A "1" value in a masking bit prevents the assertion of the hardware IntL pin.

Bit	Type	Function	Default
7	Read/Write	Tx4 LOS Masking bit for TX LOS indicator, channel 4	0
6	Read/Write	Tx3 LOS Masking bit for TX LOS indicator, channel 3	0
5	Read/Write	Tx2 LOS Masking bit for TX LOS indicator, channel 2	0
4	Read/Write	Tx1 LOS Masking bit for TX LOS indicator, channel 1	0
3	Read/Write	Rx4 LOS Masking bit for RX LOS indicator, channel 4	0
2	Read/Write	Rx3 LOS Masking bit for RX LOS indicator, channel 3	0
1	Read/Write	Rx2 LOS Masking bit for RX LOS indicator, channel 2	0
0	Read/Write	Rx1 LOS Masking bit for RX LOS indicator, channel 1	0

Lower Page 0: Register 101: TX fault Interrupt masking bits

A "1" value in a masking bit prevents the assertion of the hardware IntL pin.

Bit	Type	Function	Default
7	Read-Only	Reserved	0
6	Read-Only	Reserved	0
5	Read-Only	Reserved	0
4	Read-Only	Reserved	0
3	Read/Write	Tx4 Fault Masking bit for TX fault indicator, channel 4	0
2	Read/Write	Tx3 Fault Masking bit for TX fault indicator, channel 3	0
1	Read/Write	Tx2 Fault Masking bit for TX fault indicator, channel 2	0
0	Read/Write	Tx1 Fault Masking bit for TX fault indicator, channel 1	0

Lower Page 0: Register 102: Reserved

Bit	Type	Function	Default
7-0	Read-Only	Reserved	0

Lower Page 0: Register 103: Temperature Interrupt masking bits

A "1" value in a masking bit prevents the assertion of the hardware IntL pin.

Bit	Type	Function	Default
7	Read/Write	Temp High Alarm Masking bit for high Temperature alarm	0
6	Read/Write	Temp Low Alarm Masking bit for low Temperature alarm	0
5	Read/Write	Temp High Warning Masking bit for high Temperature warning	0
4	Read/Write	Temp Low Warning Masking bit for low Temperature warning	0
3	Read-Only	Reserved	0
2	Read-Only	Reserved	0
1	Read-Only	Reserved	0
0	Read-Only	Reserved	0

Lower Page 0: Register 104: Vcc Interrupt masking bits

A "1" value in a masking bit prevents the assertion of the hardware IntL pin.

Bit	Type	Function	Default
7	Read/Write	Vcc High Alarm Masking bit for high Vcc alarm	0
6	Read/Write	Vcc Low Alarm Masking bit for low Vcc alarm	0
5	Read/Write	Vcc High Warning Masking bit for high Vcc warning	0
4	Read/Write	Vcc Low Warning Masking bit for low Vcc warning	0
3	Read-Only	Reserved	0
2	Read-Only	Reserved	0
1	Read-Only	Reserved	0
0	Read-Only	Reserved	0

Lower Page 0: Register 105 through 118: Reserved

Bit	Type	Function	Default
7-0	Read-Only	Reserved	0

Lower Page 0: Register 119 through 122: Host Manufacturer Password entry area

Host Manufacturer passwords are initially set to 00 00 10 11 HEX. The Host Manufacturer password may be changed by writing a new password into these bytes when the correct current Host manufacturer password has been entered in bytes 123-126, with the high order bit being ignored and forced to a value of 0 in the new password.

Byte	Type	Function	Default (HEX)
119	Write-Only	Host Manufacturer Password entry area	00
120	Write-Only	Host Manufacturer Password entry area	00
121	Write-Only	Host Manufacturer Password entry area	00
122	Write-Only	Host Manufacturer Password entry area	00

Lower Page 0: Register 123 through 126: Password entry area

Used to control read/write access to vendor specific page 02h (Write protection of Serial ID and other QSFP read only information). A correct password written to this field allows read AND write access to Upper page 2.

Byte	Type	Function	Default (HEX)
123	Write-Only	Password entry area	00
124	Write-Only	Password entry area	00
125	Write-Only	Password entry area	00
126	Write-Only	Password entry area	00

Lower Page 0: Register 127: Page select

00,01,10,11 for Upper page 0, 1, 2, or 3

Bit	Type	Function	Default
7	Read/Write	Page select	0
6	Read/Write	Page select	0
5	Read/Write	Page select	0
4	Read/Write	Page select	0
3	Read/Write	Page select	0
2	Read/Write	Page select	0
1	Read/Write	Page select	0
0	Read/Write	Page select	0

UPPER PAGE 0

All Bits in Upper Page 0 are Volatile. If the module is reset, the bit fields will return to their Default Values.

Upper Page 0: Register 128: Identifier, QSFP

Bit	Type	Function	Default
7	Read-Only	Identifier, QSFP	0
6	Read-Only	Identifier, QSFP	0
5	Read-Only	Identifier, QSFP	0
4	Read-Only	Identifier, QSFP	0
3	Read-Only	Identifier, QSFP	1
2	Read-Only	Identifier, QSFP	1
1	Read-Only	Identifier, QSFP	0
0	Read-Only	Identifier, QSFP	0

Upper Page 0: Register 129: Extender Identifier

Bit	Type	Function	Default
7-6	Read-Only	00: Power Class 1 Module (1.5 W max. power consumption) 01: Power Class 2 Module (2.0 W max. power consumption) 10: Power Class 3 Module (2.5 W max. power consumption) 11: Power Class 4 Module (3.5 W max. power consumption)	01
5	Read-Only	Reserved	0
4	Read-Only	0: No CLEI code present in Page 02h 1: CLEI code present in Page 02h	0
3	Read-Only	Reserved	0
2	Read-Only	Reserved	0
1	Read-Only	Reserved	0
0	Read-Only	Reserved	0

Upper Page 0: Register 130: Optical connector

Bit	Type	Function	Default
7	Read-Only	MPO Optical connector	0
6	Read-Only	MPO Optical connector	0
5	Read-Only	MPO Optical connector	0
4	Read-Only	MPO Optical connector	0
3	Read-Only	MPO Optical connector	1
2	Read-Only	MPO Optical connector	1
1	Read-Only	MPO Optical connector	0
0	Read-Only	MPO Optical connector	0

This register reads 0x0C Hex indicating an MPO Optical connector

Upper Page 0: Register 131: 10 Gigabit Ethernet Compliance Codes (Not Used)

Bit	Type	Function	Default
7-0	Read-Only	Not Used	0

Upper Page 0: Register 132: SONET Compliance Codes (Not Used)

Bit	Type	Function	Default
7-0	Read-Only	Not Used	0

Upper Page 0: Register 133: SONET Compliance Codes (Not Used)

Bit	Type	Function	Default
7-0	Read-Only	Not Used	0

Upper Page 0: Register 134: Gigabit Ethernet Compliance Codes (Not Used)

Bit	Type	Function	Default
7-0	Read-Only	Not Used	0

Upper Page 0: Register 135: Fibre Channel Link Length (Not Used)

Bit	Type	Function	Default
7-0	Read-Only	Not Used	0

Upper Page 0: Register 136: Fibre Channel transmitter technology (Not Used)

Bit	Type	Function	Default
7-0	Read-Only	Not Used	0

Upper Page 0: Register 137: Fibre Channel transmission media (Not Used)

Bit	Type	Function	Default
7-0	Read-Only	Not Used	0

Upper Page 0: Register 138: Fibre Channel Speed (Not Used)

Bit	Type	Function	Default
7-0	Read-Only	Not Used	0

Upper Page 0: Register 139: Code for Serial Encoding Algorithm

Bit	Type	Function	Default
7	Read-Only	8B/10B	0
6	Read-Only	8B/10B	0
5	Read-Only	8B/10B	0
4	Read-Only	8B/10B	0
3	Read-Only	8B/10B	0
2	Read-Only	8B/10B	0
1	Read-Only	8B/10B	0
0	Read-Only	8B/10B	1

Upper Page 0: Register 140: Nominal bit rate

Bit	Type	Function	Default
7	Read-Only	The nominal bit rate (BR, nominal) is specified in units of 100 Megabits per second: 10G	0
6	Read-Only	nominal bit rate: 10G	1
5	Read-Only	nominal bit rate: 10G	1
4	Read-Only	nominal bit rate: 10G	0
3	Read-Only	nominal bit rate: 10G	0
2	Read-Only	nominal bit rate: 10G	1
1	Read-Only	nominal bit rate: 10G	0
0	Read-Only	nominal bit rate: 10G	0

Upper Page 0: Register 141: Extended Rate Compliance (Not used)

Bit	Type	Function	Default
7-0	Read-Only	Not Used	0

Upper Page 0: Register 142: Length Standard SM Fiber km (Not Used)

Bit	Type	Function	Default
7-0	Read-Only	Not Used	0

Upper Page 0: Register 143: Link length supported for EBW 50/125 μm fiber, units of 2 m

Bit	Type	Function	Default
7	Read-Only	OM3 link distance (100m)	0
6	Read-Only	OM3 link distance (100m)	0
5	Read-Only	OM3 link distance (100m)	1
4	Read-Only	OM3 link distance (100m)	1
3	Read-Only	OM3 link distance (100m)	0
2	Read-Only	OM3 link distance (100m)	0
1	Read-Only	OM3 link distance (100m)	1
0	Read-Only	OM3 link distance (100m)	0

2000 MHZ*km (850 nm) extended bandwidth 50 micron core multimode Fiber

Upper Page 0: Register 144 Link length supported for 50/125 μ m fiber, units of 1 m

Bit	Type	Function	Default
7	Read-Only	OM2 link distance (35m)	0
6	Read-Only	OM2 link distance (35m)	0
5	Read-Only	OM2 link distance (35m)	1
4	Read-Only	OM2 link distance (35m)	0
3	Read-Only	OM2 link distance (35m)	0
2	Read-Only	OM2 link distance (35m)	0
1	Read-Only	OM2 link distance (35m)	1
0	Read-Only	OM2 link distance (35m)	1

Upper Page 0: Register 145: Length OM1 (Not Used)

Bit	Type	Function	Default
7-0	Read-Only	Not Used	0

Upper Page 0: Register 146: Copper link distance (Not Used)

Bit	Type	Function	Default
7-0	Read-Only	Not Used	0

Upper Page 0: Register 147: Device technology

Bit	Type	Function	Default
7-4	Read-Only	850 nm VCSEL	0
3	Read-Only	No wavelength control	0
2	Read-Only	Uncooled transmitter device	0
1	Read-Only	PIN detector	0
0	Read-Only	Transmitter not tuneable	0

Upper Page 0: Register 148 through 163: QSFP vendor name (ASCII)

Byte	Type	Function	Default (HEX)
148	Read-Only	QSFP vendor name (ASCII) AVAGO	41
149	Read-Only	QSFP vendor name (ASCII) AVAGO	56
150	Read-Only	QSFP vendor name (ASCII) AVAGO	41
151	Read-Only	QSFP vendor name (ASCII) AVAGO	47
152	Read-Only	QSFP vendor name (ASCII) AVAGO	4F
153	Read-Only	QSFP vendor name (ASCII) AVAGO	20
154	Read-Only	QSFP vendor name (ASCII) AVAGO	20
155	Read-Only	QSFP vendor name (ASCII) AVAGO	20
156	Read-Only	QSFP vendor name (ASCII) AVAGO	20
157	Read-Only	QSFP vendor name (ASCII) AVAGO	20
158	Read-Only	QSFP vendor name (ASCII) AVAGO	20
159	Read-Only	QSFP vendor name (ASCII) AVAGO	20
160	Read-Only	QSFP vendor name (ASCII) AVAGO	20
161	Read-Only	QSFP vendor name (ASCII) AVAGO	20
162	Read-Only	QSFP vendor name (ASCII) AVAGO	20
163	Read-Only	QSFP vendor name (ASCII) AVAGO	20

Upper Page 0: Register 164: Extended Transceiver Codes for InfiniBand

Bit	Type	Function	Default
7	Read-Only	Reserved	0
6	Read-Only	Reserved	0
5	Read-Only	IB 4X 850 nm	1
4	Read-Only	IB 4X Copper Active	0
3	Read-Only	IB 4X Copper Passive	0
2	Read-Only	QDR Speed (10 Gb/s)	1
1	Read-Only	DDR Speed (5.0 Gb/s)	1
0	Read-Only	SDR Speed (2.5 Gbps)	1

Upper Page 0: Register 165 through 167: QSFP vendor IEEE company ID

Byte	Type	Function	Default (HEX)
165	Read-Only	QSFP vendor IEEE company ID (Avago)	00
166	Read-Only	QSFP vendor IEEE company ID (Avago)	17
167	Read-Only	QSFP vendor IEEE company ID (Avago)	6A

Upper Page 0: Register 168 through 183: Part number QSFP vendor (ASCII)

Byte	Type	Function	Default (HEX)
168	Read-Only	QSFP vendor (ASCII) : A	41
169	Read-Only	QSFP vendor (ASCII) : F	46
170	Read-Only	QSFP vendor (ASCII) : B	42
171	Read-Only	QSFP vendor (ASCII) : R	52
172	Read-Only	QSFP vendor (ASCII) : -	2D
173	Read-Only	QSFP vendor (ASCII) : 7	37
174	Read-Only	QSFP vendor (ASCII) : 9	39
175	Read-Only	QSFP vendor (ASCII) : Q	51
176	Read-Only	QSFP vendor (ASCII) : 4	34
177	Read-Only	QSFP vendor (ASCII) : Z	5A
178	Read-Only	QSFP vendor (ASCII)	20
179	Read-Only	QSFP vendor (ASCII)	20
180	Read-Only	QSFP vendor (ASCII)	20
181	Read-Only	QSFP vendor (ASCII)	20
182	Read-Only	QSFP vendor (ASCII)	20
183	Read-Only	QSFP vendor (ASCII)	20

Upper Page 0: Register 184 and 185: Revision level for part number (provided by vendor)

Byte	Type	Function	Default (HEX)
184	Read-Only	Vendor Revision	00
185	Read-Only	Vendor Revision	00

Upper Page 0: Register 186 and 187: Nominal laser wavelength (Wavelength = value / 20 in nm)

Byte	Type	Function	Default (HEX)
186	Read-Only	Nominal laser wavelength: 850nm	42
187	Read-Only	Nominal laser wavelength: 850nm	68

Upper Page 0: Register 188 and 189: Wavelength Tolerance

Byte	Type	Function	Default (HEX)
188	Read-Only	Reserved	00
189	Read-Only	Reserved	00

Upper Page 0: Register 190: Maximum Case Temperature in Degrees C

Bit	Type	Function	Default
7	Read-Only	Max module case temp, 70C	0
6	Read-Only	Max module case temp, 70C	1
5	Read-Only	Max module case temp, 70C	0
4	Read-Only	Max module case temp, 70C	0
3	Read-Only	Max module case temp, 70C	0
2	Read-Only	Max module case temp, 70C	1
1	Read-Only	Max module case temp, 70C	1
0	Read-Only	Max module case temp, 70C	0

Upper Page 0: Register 191: Check code for Base ID Fields (addresses 128-190)

Bit	Type	Function	Default
7	Read-Only	Checksum, byte 128-190	
6	Read-Only	Checksum, byte 128-190	
5	Read-Only	Checksum, byte 128-190	
4	Read-Only	Checksum, byte 128-190	
3	Read-Only	Checksum, byte 128-190	
2	Read-Only	Checksum, byte 128-190	
1	Read-Only	Checksum, byte 128-190	
0	Read-Only	Checksum, byte 128-190	

Upper Page 0: Register 192 and 193: Reserved

Bit	Type	Function	Default
7	Read-Only	Reserved	0
6	Read-Only	Reserved	0
5	Read-Only	Reserved	0
4	Read-Only	Reserved	0
3	Read-Only	Reserved	0
2	Read-Only	Reserved	0
1	Read-Only	Reserved	0
0	Read-Only	Reserved	0

Upper Page 0: Register 194: RX and TX output control

Bit	Type	Function	Default
7	Read-Only	Reserved	0
6	Read-Only	Reserved	0
5	Read-Only	Reserved	0
4	Read-Only	Reserved	0
3	Read-Only	Rx_Squelch Disable implemented, coded 1 if implemented, else 0	1
2	Read-Only	Rx_Output Disable capable: coded 1 if implemented, else 0.	1
1	Read-Only	Tx Squelch Disable implemented: coded 1 if implemented, else 0	1
0	Read-Only	Tx Squelch implemented: coded 1 if implemented, else 0	1

Upper Page 0: Register 195: Module Option Control

Bit	Type	Function	Default
7	Read-Only	Memory page 02 provided: coded 1 if implemented, else 0.	1
6	Read-Only	Memory page 01 provided: coded 1 if implemented, else 0.	1
5	Read-Only	No control of the rate select bits in the upper memory table is required. In all cases, compliance with multiple rate standards should be determined by Transceiver Codes in Bytes 132, 133, 134 and 135 of Page 00h.	0
4	Read-Only	TX_DISABLE is implemented and disables the serial output.	1
3	Read-Only	TX_FAULT signal implemented, coded 1 if implemented, else 0	1
2	Read-Only	Tx Squelch implemented to reduce OMA: coded 0,implemented to reduce Pave coded 1	1
1	Read-Only	Loss of Signal implemented	1
0	Read-Only	Reserved	0

Upper Page 0: Register 196 through 211: Serial number provided by vendor (ASCII)

Byte	Type	Function	Default (HEX)
196	Read-Only	Serial Number (ASCII) Byte	
197	Read-Only	Serial Number (ASCII) Byte	
198	Read-Only	Serial Number (ASCII) Byte	
199	Read-Only	Serial Number (ASCII) Byte	
200	Read-Only	Serial Number (ASCII) Byte	
201	Read-Only	Serial Number (ASCII) Byte	
202	Read-Only	Serial Number (ASCII) Byte	
203	Read-Only	Serial Number (ASCII) Byte	
204	Read-Only	Serial Number (ASCII) Byte	
205	Read-Only	Serial Number (ASCII) Byte	
206	Read-Only	Serial Number (ASCII) Byte	
207	Read-Only	Serial Number (ASCII) Byte	
208	Read-Only	Serial Number (ASCII) Byte	
209	Read-Only	Serial Number (ASCII) Byte	
210	Read-Only	Serial Number (ASCII) Byte	
211	Read-Only	Serial Number (ASCII) Byte	

Upper Page 0: Register 212 through 219: Date code Vendor's manufacturing date code ASCII

Two low order digits of year. (00 = 2000).

Byte	Type	Function	Default (HEX)
212	Read-Only	Date Code (ASCII) Byte	
213	Read-Only	Date Code (ASCII) Byte	
214	Read-Only	Date Code (ASCII) Byte	
215	Read-Only	Date Code (ASCII) Byte	
216	Read-Only	Date Code (ASCII) Byte	
217	Read-Only	Date Code (ASCII) Byte	
218	Read-Only	Date Code (ASCII) Byte	
219	Read-Only	Date Code (ASCII) Byte	

Upper Page 0: Register 220: Diagnostic Monitoring Type

Bit	Type	Function	Default
7-5	Read-Only	Reserved	0
4	Read-Only	Module Respond to FEC BER, 0 = No BER Support	0
3	Read-Only	Received power measurement type, 1 = Average Power	1
2	Read-Only	Reserved	0
1	Read-Only	Reserved	0
0	Read-Only	Reserved	0

Upper Page 0: Register 221: Enhanced Options (Not Used)

Bit	Type	Function	Default
7-0	Read-Only	Reserved	0

Upper Page 0: Register 222: Reserved

Bit	Type	Function	Default
7-0	Read-Only	Reserved	0

Upper Page 0: Register 223: Checksum, byte 192-222

Bit	Type	Function	Default
7	Read-Only	Reserved	
6	Read-Only	Reserved	
5	Read-Only	Reserved	
4	Read-Only	Reserved	
3	Read-Only	Reserved	
2	Read-Only	Reserved	
1	Read-Only	Reserved	
0	Read-Only	Reserved	

Upper Page 0: Register 224 through 249: Vendor Specific EEPROM

Byte	Type	Function	Default (HEX)
224	Read-Only	Vendor Specific EEPROM	
225	Read-Only	Vendor Specific EEPROM	
226	Read-Only	Vendor Specific EEPROM	
227	Read-Only	Vendor Specific EEPROM	
228	Read-Only	Vendor Specific EEPROM	
229	Read-Only	Vendor Specific EEPROM	
230	Read-Only	Vendor Specific EEPROM	
231	Read-Only	Vendor Specific EEPROM	
232	Read-Only	Vendor Specific EEPROM	
233	Read-Only	Vendor Specific EEPROM	
234	Read-Only	Vendor Specific EEPROM	
235	Read-Only	Vendor Specific EEPROM	
236	Read-Only	Vendor Specific EEPROM	
237	Read-Only	Vendor Specific EEPROM	
238	Read-Only	Vendor Specific EEPROM	
239	Read-Only	Vendor Specific EEPROM	
240	Read-Only	Vendor Specific EEPROM	
241	Read-Only	Vendor Specific EEPROM	
242	Read-Only	Vendor Specific EEPROM	
243	Read-Only	Vendor Specific EEPROM	
244	Read-Only	Vendor Specific EEPROM	
245	Read-Only	Vendor Specific EEPROM	
246	Read-Only	Vendor Specific EEPROM	
247	Read-Only	Vendor Specific EEPROM	
248	Read-Only	Vendor Specific EEPROM	
249	Read-Only	Vendor Specific EEPROM	

Upper Page 0: Register 250 through 251: Avago Reserved Field

Byte	Type	Function	Default (HEX)
250	Read-Only	Avago Reserved Field	00
251	Read-Only	Avago Reserved Field	00

Upper Page 0: Register 252 and 253: Avago Reserved Field

Byte	Type	Function	Default (HEX)
252	Read-Only	Avago Reserved Field	00
253	Read-Only	Avago Reserved Field	17

Upper Page 0: Register 254 and 255: Avago FW revision

Byte	Type	Function	Default (HEX)
254	Read-Only	Avago FW revision	00
255	Read-Only	Avago FW revision	09

UPPER PAGE 1

Upper Page 1: Register 128: Check code for the Application Select Table

CC_APPS Check code for the AST; the check code shall be the low order 8 bits of the sum of the contents of all the bytes from byte 129 to byte 255, inclusive.

Bit	Type	Function	Default
7-0	Read-Only	Reserved	0

Upper Page 1: Register 129: Application Select Table Table Length

Bit	Type	Function	Default
7	Read-Only	Reserved	0
6	Read-Only	Reserved	0
5-0	Read-Only	AST Table Length. A 6-bit binary number specifies how many application table entries are defined in bytes 130-255 addresses. Table Length is valid between 0 (1 entry) and 62 (for a total of 63 entries).	0

Upper Page 1: Register 130 through 255: Application code

Low order Byte								High Order Byte							
7	6	5	4	3	2	1	0	7	6	5	4	3	2	1	0
Reserved			Category					variant							

130, 131 7-0, 7-0 Application code 0 Definition of first application supported

… Other table entries

130+2*TL,

131+2*TL

7-0, 7-0 Application code TL Definition of last application supported

UPPER PAGE 2

All Bits in Upper Page 2 are Non-Volatile. If the module is reset, the bit fields stay as defined.

The content in Upper Page 2 is write accessible with the Host Manufacturer Password: Enter password in Bytes 123-126 in Lower Page 0.

If bit 4 of Page 00 byte 129 is set, the first 10 bytes of Table 02h, bytes128-137 are reserved to store the CLEI code for the module.

Upper Page 2: Register 128 through 137: Module CLEI code

Upper Page 2: Register 138 through 255: User Writable EEPROM

UPPER PAGE 3

All Bits in Upper Page 3 are Volatile. If the module is reset, the bit fields will return to their Default Values.

Upper Page 3: Register 128: Temp High Alarm MSB

Temperature is represented as a 16-bit twos complement value in increments of 1/256 degrees Celsius.
0x4B00 = 19200 decimal
19200 / 256 = 75 Degrees Celsius

Bit	Type	Function	Default
7	Read-Only	Temp High Alarm MSB	0
6	Read-Only	Temp High Alarm MSB	1
5	Read-Only	Temp High Alarm MSB	0
4	Read-Only	Temp High Alarm MSB	0
3	Read-Only	Temp High Alarm MSB	1
2	Read-Only	Temp High Alarm MSB	0
1	Read-Only	Temp High Alarm MSB	1
0	Read-Only	Temp High Alarm MSB	1

Upper Page 3: Register 129: Temp High Alarm LSB

Bit	Type	Function	Default
7	Read-Only	Temp High Alarm LSB	0
6	Read-Only	Temp High Alarm LSB	0
5	Read-Only	Temp High Alarm LSB	0
4	Read-Only	Temp High Alarm LSB	0
3	Read-Only	Temp High Alarm LSB	0
2	Read-Only	Temp High Alarm LSB	0
1	Read-Only	Temp High Alarm LSB	0
0	Read-Only	Temp High Alarm LSB	0

Upper Page 3: Register 130: Temp Low Alarm MSB

Temperature is represented as a 16-bit twos complement value in increments of 1/256 degrees Celsius.
0xFB00 = 64256 decimal
(65535- 64256) / 256 = -5 Degrees Celsius

Bit	Type	Function	Default
7	Read-Only	Temp Low Alarm MSB	1
6	Read-Only	Temp Low Alarm MSB	1
5	Read-Only	Temp Low Alarm MSB	1
4	Read-Only	Temp Low Alarm MSB	1
3	Read-Only	Temp Low Alarm MSB	1
2	Read-Only	Temp Low Alarm MSB	0
1	Read-Only	Temp Low Alarm MSB	1
0	Read-Only	Temp Low Alarm MSB	1

Upper Page 3: Register 131: Temp Low Alarm LSB

Bit	Type	Function	Default
7	Read-Only	Temp Low Alarm LSB	0
6	Read-Only	Temp Low Alarm LSB	0
5	Read-Only	Temp Low Alarm LSB	0
4	Read-Only	Temp Low Alarm LSB	0
3	Read-Only	Temp Low Alarm LSB	0
2	Read-Only	Temp Low Alarm LSB	0
1	Read-Only	Temp Low Alarm LSB	0
0	Read-Only	Temp Low Alarm LSB	0

Upper Page 3: Register 132: Temp High Warning MSB

Temperature is represented as a 16-bit twos complement value in increments of 1/256 degrees Celsius.
0x4600 = 17920 decimal
17920 / 256 = 70 Degrees Celsius

Bit	Type	Function	Default
7	Read-Only	Temp High Warning MSB	0
6	Read-Only	Temp High Warning MSB	1
5	Read-Only	Temp High Warning MSB	0
4	Read-Only	Temp High Warning MSB	0
3	Read-Only	Temp High Warning MSB	0
2	Read-Only	Temp High Warning MSB	1
1	Read-Only	Temp High Warning MSB	1
0	Read-Only	Temp High Warning MSB	0

Upper Page 3: Register 133: Temp High Warning LSB

Bit	Type	Function	Default
7	Read-Only	Temp High Warning LSB	0
6	Read-Only	Temp High Warning LSB	0
5	Read-Only	Temp High Warning LSB	0
4	Read-Only	Temp High Warning LSB	0
3	Read-Only	Temp High Warning LSB	0
2	Read-Only	Temp High Warning LSB	0
1	Read-Only	Temp High Warning LSB	0
0	Read-Only	Temp High Warning LSB	0

Upper Page 3: Register 134: Temp Low Warning MSB

Temperature is represented as a 16-bit twos complement value in increments of 1/256 degrees Celsius.
0x0000 = 0 degrees Celsius

Bit	Type	Function	Default
7	Read-Only	Temp Low Warning MSB	0
6	Read-Only	Temp Low Warning MSB	0
5	Read-Only	Temp Low Warning MSB	0
4	Read-Only	Temp Low Warning MSB	0
3	Read-Only	Temp Low Warning MSB	0
2	Read-Only	Temp Low Warning MSB	0
1	Read-Only	Temp Low Warning MSB	0
0	Read-Only	Temp Low Warning MSB	0

Upper Page 3: Register 135: Temp Low Alarm LSB

Bit	Type	Function	Default
7	Read-Only	Temp Low Warning LSB	0
6	Read-Only	Temp Low Warning LSB	0
5	Read-Only	Temp Low Warning LSB	0
4	Read-Only	Temp Low Warning LSB	0
3	Read-Only	Temp Low Warning LSB	0
2	Read-Only	Temp Low Warning LSB	0
1	Read-Only	Temp Low Warning LSB	0
0	Read-Only	Temp Low Warning LSB	0

Upper Page 3: Register 136 through 143: Reserved

Bit	Type	Function	Default
7-0	Read-Only	Reserved	0

Upper Page 3: Register 144: Vcc High Alarm MSB

Internally measured supply voltage is represented as a 16-bit unsigned integer in increments of 100 uVolts
0x8DCC = 36300
36300 / 10000 = 3.63V

Bit	Type	Function	Default
7	Read-Only	Vcc High Alarm MSB	1
6	Read-Only	Vcc High Alarm MSB	0
5	Read-Only	Vcc High Alarm MSB	0
4	Read-Only	Vcc High Alarm MSB	0
3	Read-Only	Vcc High Alarm MSB	1
2	Read-Only	Vcc High Alarm MSB	1
1	Read-Only	Vcc High Alarm MSB	0
0	Read-Only	Vcc High Alarm MSB	1

Upper Page 3: Register 145: Vcc High Alarm LSB

Bit	Type	Function	Default
7	Read-Only	Vcc High Alarm LSB	1
6	Read-Only	Vcc High Alarm LSB	1
5	Read-Only	Vcc High Alarm LSB	0
4	Read-Only	Vcc High Alarm LSB	0
3	Read-Only	Vcc High Alarm LSB	1
2	Read-Only	Vcc High Alarm LSB	1
1	Read-Only	Vcc High Alarm LSB	0
0	Read-Only	Vcc High Alarm LSB	0

Upper Page 3: Register 146: Vcc Low Alarm MSB

Internally measured supply voltage is represented as a 16-bit unsigned integer in increments of 100 uVolts
0x7404 = 29700
29700 / 10000 = 2.97V

Bit	Type	Function	Default
7	Read-Only	Vcc Low Alarm MSB	0
6	Read-Only	Vcc Low Alarm MSB	1
5	Read-Only	Vcc Low Alarm MSB	1
4	Read-Only	Vcc Low Alarm MSB	1
3	Read-Only	Vcc Low Alarm MSB	0
2	Read-Only	Vcc Low Alarm MSB	1
1	Read-Only	Vcc Low Alarm MSB	0
0	Read-Only	Vcc Low Alarm MSB	0

Upper Page 3: Register 147: Vcc Low Alarm LSB

Bit	Type	Function	Default
7	Read-Only	Vcc Low Alarm LSB	0
6	Read-Only	Vcc Low Alarm LSB	0
5	Read-Only	Vcc Low Alarm LSB	0
4	Read-Only	Vcc Low Alarm LSB	0
3	Read-Only	Vcc Low Alarm LSB	0
2	Read-Only	Vcc Low Alarm LSB	1
1	Read-Only	Vcc Low Alarm LSB	0
0	Read-Only	Vcc Low Alarm LSB	0

Upper Page 3: Register 148: Vcc High Warning MSB

Internally measured supply voltage is represented as a 16-bit unsigned integer in increments of 100 uVolts
0x875A = 34650
34650/ 10000 = 3.465V

Bit	Type	Function	Default
7	Read-Only	Vcc High Warning MSB	1
6	Read-Only	Vcc High Warning MSB	0
5	Read-Only	Vcc High Warning MSB	0
4	Read-Only	Vcc High Warning MSB	0
3	Read-Only	Vcc High Warning MSB	0
2	Read-Only	Vcc High Warning MSB	1
1	Read-Only	Vcc High Warning MSB	1
0	Read-Only	Vcc High Warning MSB	1

Upper Page 3: Register 149: Vcc High Warning LSB

Bit	Type	Function	Default
7	Read-Only	Vcc High Warning LSB	0
6	Read-Only	Vcc High Warning LSB	1
5	Read-Only	Vcc High Warning LSB	0
4	Read-Only	Vcc High Warning LSB	1
3	Read-Only	Vcc High Warning LSB	1
2	Read-Only	Vcc High Warning LSB	0
1	Read-Only	Vcc High Warning LSB	1
0	Read-Only	Vcc High Warning LSB	0

Upper Page 3: Register 150: Vcc Low Warning MSB

Internally measured supply voltage is represented as a 16-bit unsigned integer in increments of 100 uVolts
0x7A75 = 31349
31349/ 10000 = 3.135V

Bit	Type	Function	Default
7	Read-Only	Vcc Low Warning MSB	0
6	Read-Only	Vcc Low Warning MSB	1
5	Read-Only	Vcc Low Warning MSB	1
4	Read-Only	Vcc Low Warning MSB	1
3	Read-Only	Vcc Low Warning MSB	1
2	Read-Only	Vcc Low Warning MSB	0
1	Read-Only	Vcc Low Warning MSB	1
0	Read-Only	Vcc Low Warning MSB	0

Upper Page 3: Register 151: Vcc Low Alarm LSB

Bit	Type	Function	Default
7	Read-Only	Vcc Low Warning LSB	0
6	Read-Only	Vcc Low Warning LSB	1
5	Read-Only	Vcc Low Warning LSB	1
4	Read-Only	Vcc Low Warning LSB	1
3	Read-Only	Vcc Low Warning LSB	0
2	Read-Only	Vcc Low Warning LSB	1
1	Read-Only	Vcc Low Warning LSB	0
0	Read-Only	Vcc Low Warning LSB	1

Upper Page 3: Register 152 through 167: Reserved

Bit	Type	Function	Default
7-0	Read-Only	Reserved	0

Upper Page 3: Register 168: Reserved

Bit	Type	Function	Default
7-0	Read-Only	Reserved	0

Upper Page 3: Register 169: Reserved

Bit	Type	Function	Default
7-0	Read-Only	Reserved	0

Upper Page 3: Register 170: Reserved

Bit	Type	Function	Default
7-0	Read-Only	Reserved	0

Upper Page 3: Register 171: Reserved

Bit	Type	Function	Default
7-0	Read-Only	Reserved	0

Upper Page 3: Register 172: Reserved

Bit	Type	Function	Default
7-0	Read-Only	Reserved	0

Upper Page 3: Register 173: Reserved

Bit	Type	Function	Default
7-0	Read-Only	Reserved	0

Upper Page 3: Register 174: Reserved

Bit	Type	Function	Default
7-0	Read-Only	Reserved	0

Upper Page 3: Register 175: Reserved

Bit	Type	Function	Default
7-0	Read-Only	Reserved	0

Upper Page 3: Register 176: Rx Power High Alarm MSB

RX received power is represented as a 16 bit unsigned integer with increments of 0.1uW.
0x3DE0 = 15840
15840/ 10000 = 1.584W

Bit	Type	Function	Default
7	Read-Only	Rx Power High Alarm MSB	0
6	Read-Only	Rx Power High Alarm MSB	0
5	Read-Only	Rx Power High Alarm MSB	1
4	Read-Only	Rx Power High Alarm MSB	1
3	Read-Only	Rx Power High Alarm MSB	1
2	Read-Only	Rx Power High Alarm MSB	1
1	Read-Only	Rx Power High Alarm MSB	0
0	Read-Only	Rx Power High Alarm MSB	1

Upper Page 3: Register 177: Rx Power High Alarm LSB

Bit	Type	Function	Default
7	Read-Only	Rx Power High Alarm LSB	1
6	Read-Only	Rx Power High Alarm LSB	1
5	Read-Only	Rx Power High Alarm LSB	1
4	Read-Only	Rx Power High Alarm LSB	0
3	Read-Only	Rx Power High Alarm LSB	0
2	Read-Only	Rx Power High Alarm LSB	0
1	Read-Only	Rx Power High Alarm LSB	0
0	Read-Only	Rx Power High Alarm LSB	0

Upper Page 3: Register 178: Rx Power Low Alarm MSB

RX received power is represented as a 16 bit unsigned integer with increments of 0.1uW.
0x0232 = 562
562/ 10000 = 0.0562W

Bit	Type	Function	Default
7	Read-Only	Rx Power Low Alarm MSB	0
6	Read-Only	Rx Power Low Alarm MSB	0
5	Read-Only	Rx Power Low Alarm MSB	0
4	Read-Only	Rx Power Low Alarm MSB	0
3	Read-Only	Rx Power Low Alarm MSB	0
2	Read-Only	Rx Power Low Alarm MSB	0
1	Read-Only	Rx Power Low Alarm MSB	1
0	Read-Only	Rx Power Low Alarm MSB	0

Upper Page 3: Register 179: Rx Power Low Alarm LSB

Bit	Type	Function	Default
7	Read-Only	Rx Power Low Alarm LSB	0
6	Read-Only	Rx Power Low Alarm LSB	0
5	Read-Only	Rx Power Low Alarm LSB	1
4	Read-Only	Rx Power Low Alarm LSB	1
3	Read-Only	Rx Power Low Alarm LSB	0
2	Read-Only	Rx Power Low Alarm LSB	0
1	Read-Only	Rx Power Low Alarm LSB	1
0	Read-Only	Rx Power Low Alarm LSB	0

Upper Page 3: Register 180: Rx Power High Warning MSB

RX received power is represented as a 16 bit unsigned integer with increments of 0.1uW.
0x3728 = 14120
14120/ 10000 = 1.412W

Bit	Type	Function	Default
7	Read-Only	Rx Power High Warning MSB	0
6	Read-Only	Rx Power High Warning MSB	0
5	Read-Only	Rx Power High Warning MSB	1
4	Read-Only	Rx Power High Warning MSB	1
3	Read-Only	Rx Power High Warning MSB	0
2	Read-Only	Rx Power High Warning MSB	1
1	Read-Only	Rx Power High Warning MSB	1
0	Read-Only	Rx Power High Warning MSB	1

Upper Page 3: Register 181: Rx Power High Warning LSB

Bit	Type	Function	Default
7	Read-Only	Rx Power High Warning LSB	0
6	Read-Only	Rx Power High Warning LSB	0
5	Read-Only	Rx Power High Warning LSB	1
4	Read-Only	Rx Power High Warning LSB	0
3	Read-Only	Rx Power High Warning LSB	1
2	Read-Only	Rx Power High Warning LSB	0
1	Read-Only	Rx Power High Warning LSB	0
0	Read-Only	Rx Power High Warning LSB	0

Upper Page 3: Register 182: Rx Power Low Warning MSB

RX received power is represented as a 16 bit unsigned integer with increments of 0.1uW.
0x0277 = 631
631/ 10000 = 0.0631W

Bit	Type	Function	Default
7	Read-Only	Rx Power Low Warning MSB	0
6	Read-Only	Rx Power Low Warning MSB	0
5	Read-Only	Rx Power Low Warning MSB	0
4	Read-Only	Rx Power Low Warning MSB	0
3	Read-Only	Rx Power Low Warning MSB	0
2	Read-Only	Rx Power Low Warning MSB	0
1	Read-Only	Rx Power Low Warning MSB	1
0	Read-Only	Rx Power Low Warning MSB	0

Upper Page 3: Register 183: Rx Power Low Warning LSB

Bit	Type	Function	Default
7	Read-Only	Rx Power Low Warning LSB	0
6	Read-Only	Rx Power Low Warning LSB	1
5	Read-Only	Rx Power Low Warning LSB	1
4	Read-Only	Rx Power Low Warning LSB	1
3	Read-Only	Rx Power Low Warning LSB	0
2	Read-Only	Rx Power Low Warning LSB	1
1	Read-Only	Rx Power Low Warning LSB	1
0	Read-Only	Rx Power Low Warning LSB	1

Upper Page 3: Register 184: Tx Bias High Alarm MSB

TX bias current is represented by a 16-bit unsigned integer in increments of 2uA.
0x1388 = 5000
5000 * 0.000002 = 10mA

Bit	Type	Function	Default
7	Read-Only	Tx Bias High Alarm MSB	0
6	Read-Only	Tx Bias High Alarm MSB	0
5	Read-Only	Tx Bias High Alarm MSB	0
4	Read-Only	Tx Bias High Alarm MSB	1
3	Read-Only	Tx Bias High Alarm MSB	0
2	Read-Only	Tx Bias High Alarm MSB	0
1	Read-Only	Tx Bias High Alarm MSB	1
0	Read-Only	Tx Bias High Alarm MSB	1

Upper Page 3: Register 185: Tx Bias High Alarm LSB

Bit	Type	Function	Default
7	Read-Only	Tx Bias High Alarm LSB	1
6	Read-Only	Tx Bias High Alarm LSB	0
5	Read-Only	Tx Bias High Alarm LSB	0
4	Read-Only	Tx Bias High Alarm LSB	0
3	Read-Only	Tx Bias High Alarm LSB	1
2	Read-Only	Tx Bias High Alarm LSB	0
1	Read-Only	Tx Bias High Alarm LSB	0
0	Read-Only	Tx Bias High Alarm LSB	0

Upper Page 3: Register 186: Tx Bias Low Alarm MSB

TX bias current is represented by a 16-bit unsigned integer in increments of 2uA.

0x00FA = 250

250 * 0.000002 = 0.5mA

Bit	Type	Function	Default
7	Read-Only	Tx Bias Low Alarm MSB	0
6	Read-Only	Tx Bias Low Alarm MSB	0
5	Read-Only	Tx Bias Low Alarm MSB	0
4	Read-Only	Tx Bias Low Alarm MSB	0
3	Read-Only	Tx Bias Low Alarm MSB	0
2	Read-Only	Tx Bias Low Alarm MSB	0
1	Read-Only	Tx Bias Low Alarm MSB	0
0	Read-Only	Tx Bias Low Alarm MSB	0

Upper Page 3: Register 187: Tx Bias Low Alarm LSB

Bit	Type	Function	Default
7	Read-Only	Tx Bias Low Alarm LSB	1
6	Read-Only	Tx Bias Low Alarm LSB	1
5	Read-Only	Tx Bias Low Alarm LSB	1
4	Read-Only	Tx Bias Low Alarm LSB	1
3	Read-Only	Tx Bias Low Alarm LSB	1
2	Read-Only	Tx Bias Low Alarm LSB	0
1	Read-Only	Tx Bias Low Alarm LSB	1
0	Read-Only	Tx Bias Low Alarm LSB	0

Upper Page 3: Register 188: Tx Bias High Warning MSB

TX bias current is represented by a 16-bit unsigned integer in increments of 2uA.
0x128E = 4750
4750* 0.000002 = 9.5mA

Bit	Type	Function	Default
7	Read-Only	Tx Bias High Warning MSB	0
6	Read-Only	Tx Bias High Warning MSB	0
5	Read-Only	Tx Bias High Warning MSB	0
4	Read-Only	Tx Bias High Warning MSB	1
3	Read-Only	Tx Bias High Warning MSB	0
2	Read-Only	Tx Bias High Warning MSB	0
1	Read-Only	Tx Bias High Warning MSB	1
0	Read-Only	Tx Bias High Warning MSB	0

Upper Page 3: Register 189: Tx Bias High Warning LSB

Bit	Type	Function	Default
7	Read-Only	Tx Bias High Warning LSB	1
6	Read-Only	Tx Bias High Warning LSB	0
5	Read-Only	Tx Bias High Warning LSB	0
4	Read-Only	Tx Bias High Warning LSB	0
3	Read-Only	Tx Bias High Warning LSB	1
2	Read-Only	Tx Bias High Warning LSB	1
1	Read-Only	Tx Bias High Warning LSB	1
0	Read-Only	Tx Bias High Warning LSB	0

Upper Page 3: Register 190: Tx Bias High Warning MSB

TX bias current is represented by a 16-bit unsigned integer in increments of 2uA.
0x01F4 = 500
500* 0.000002 = 1mA

Bit	Type	Function	Default
7	Read-Only	Tx Bias High Warning MSB	0
6	Read-Only	Tx Bias High Warning MSB	0
5	Read-Only	Tx Bias High Warning MSB	0
4	Read-Only	Tx Bias High Warning MSB	0
3	Read-Only	Tx Bias High Warning MSB	0
2	Read-Only	Tx Bias High Warning MSB	0
1	Read-Only	Tx Bias High Warning MSB	0
0	Read-Only	Tx Bias High Warning MSB	1

Upper Page 3: Register 191: Tx Bias Low Warning LSB

Bit	Type	Function	Default
7	Read-Only	Tx Bias High Warning LSB	1
6	Read-Only	Tx Bias High Warning LSB	1
5	Read-Only	Tx Bias High Warning LSB	1
4	Read-Only	Tx Bias High Warning LSB	1
3	Read-Only	Tx Bias High Warning LSB	0
2	Read-Only	Tx Bias High Warning LSB	1
1	Read-Only	Tx Bias High Warning LSB	0
0	Read-Only	Tx Bias High Warning LSB	0

Upper Page 3: Register 192 through 225: Reserved

Bit	Type	Function	Default
7-0	Read-Only	Reserved	0

Upper Page 3: Register 226 through 234: Reserved

Bit	Type	Function	Default
7-0	Read-Only	Reserved	0

Upper Page 3: Register 235: Vendor specific channel control: Tx, Rx Polarity

Bit	Type	Function	Default
7	Read/Write	Tx input polarity flip for channel 4	1
6	Read/Write	Tx input polarity flip for channel 3	1
5	Read/Write	Tx input polarity flip for channel 2	1
4	Read/Write	Tx input polarity flip for channel 1	1
3	Read/Write	Rx output polarity flip for channel 4; 1=flip; 0=non-flip	0
2	Read/Write	Rx output polarity flip for channel 3; 1=flip; 0=non-flip	0
1	Read/Write	Rx output polarity flip for channel 2; 1=flip; 0=non-flip	0
0	Read/Write	Rx output polarity flip for channel 1; 1=flip; 0=non-flip	0

Upper Page 3: Register 236: Avago Reserved Fields

Bit	Type	Function	Default
7-0	Read-Only	Avago Reserved	0x77

Upper Page 3: Register 237: Avago Reserved Fields

Bit	Type	Function	Default
7-0	Read-Only	Avago Reserved	0x77

Upper Page 3: Register 238: Avago Reserved Fields

Bit	Type	Function	Default
7-0	Read-Only	Avago Reserved	0x77

Upper Page 3: Register 239: Avago Reserved Fields

Bit	Type	Function	Default
7-0	Read-Only	Avago Reserved	0x77

Upper Page 3: Register 240: RX and TX squelch disable

Bit	Type	Function	Default
7	Read/Write	Rx Squelch Disable, channel 4	0
6	Read/Write	Rx Squelch Disable, channel 3	0
5	Read/Write	Rx Squelch Disable, channel 2	0
4	Read/Write	Rx Squelch Disable, channel 1	0
3	Read/Write	Tx Squelch Disable, channel 4	0
2	Read/Write	Tx Squelch Disable, channel 3	0
1	Read/Write	Tx Squelch Disable, channel 2	0
0	Read/Write	Tx Squelch Disable, channel 1	0

Upper Page 3: Register 241: RX output disable

Bit	Type	Function	Default
7	Read/Write	Rx Output Disable, channel 4	0
6	Read/Write	Rx Output Disable, channel 3	0
5	Read/Write	Rx Output Disable, channel 2	0
4	Read/Write	Rx Output Disable, channel 1	0
3	Read/Write	Reserved	0
2	Read/Write	Reserved	0
1	Read/Write	Reserved	0
0	Read/Write	Reserved	0

Upper Page 3: Register 242: RX power DMI Interrupt mask bits (ch1, 2)

A "1" value in a masking bit prevents the assertion of the hardware IntL pin.

Bit	Type	Function	Default
7	Read/Write	Rx1 Power High Alarm Masking bit for high RX Power alarm, channel 1	1
6	Read/Write	Rx1 Power Low Alarm Masking bit for low RX Power alarm, channel 1	1
5	Read/Write	Rx1 Power High Warning Masking bit for high RX Power warning, channel 1	1
4	Read/Write	Rx1 Power Low Warning Masking bit for low RX Power warning, channel 1	1
3	Read/Write	Rx2 Power High Alarm Masking bit for high RX Power alarm, channel 2	1
2	Read/Write	Rx2 Power Low Alarm Masking bit for low RX Power alarm, channel 2	1
1	Read/Write	Rx2 Power High Warning Masking bit for high RX Power warning, channel 2	1
0	Read/Write	Rx2 Power Low Warning Masking bit for low RX Power warning, channel 2	1

Upper Page 3: Register 243: RX power DMI Interrupt mask bits (ch3, 4)

A "1" value in a masking bit prevents the assertion of the hardware IntL pin.

Bit	Type	Function	Default
7	Read/Write	Rx3 Power High Alarm Masking bit for high RX Power alarm, channel 3	1
6	Read/Write	Rx3 Power Low Alarm Masking bit for low RX Power alarm, channel 3	1
5	Read/Write	Rx3 Power High Warning Masking bit for high RX Power warning, channel 3	1
4	Read/Write	Rx3 Power Low Warning Masking bit for low RX Power warning, channel 3	1
3	Read/Write	Rx4 Power High Alarm Masking bit for high RX Power alarm, channel 4	1
2	Read/Write	Rx4 Power Low Alarm Masking bit for low RX Power alarm, channel 4	1
1	Read/Write	Rx4 Power High Warning Masking bit for high RX Power warning, channel 4	1
0	Read/Write	Rx4 Power Low Warning Masking bit for low RX Power warning, channel 4	1

Upper Page 3: Register 244: TX bias DMI Interrupt mask bits (ch1, 2)

A "1" value in a masking bit prevents the assertion of the hardware IntL pin.

Bit	Type	Function	Default
7	Read/Write	Tx1 Bias High Alarm Masking bit for high TX Bias alarm, channel 1	1
6	Read/Write	Tx1 Bias Low Alarm Masking bit for low TX Bias alarm, channel 1	1
5	Read/Write	Tx1 Bias High Warning Masking bit for high TX Bias warning, channel 1	1
4	Read/Write	Tx1 Bias Low Warning Masking bit for low TX Bias warning, channel 1	1
3	Read/Write	Tx2 Bias High Alarm Masking bit for high TX Bias alarm, channel 2	1
2	Read/Write	Tx2 Bias Low Alarm Masking bit for low TX Bias alarm, channel 2	1
1	Read/Write	Tx2 Bias High Warning Masking bit for high TX Bias warning, channel 2	1
0	Read/Write	Tx2 Bias Low Warning Masking bit for low TX Bias warning, channel 2	1

Upper Page 3: Register 245: TX bias DMI Interrupt mask bits (ch3, 4)

A "1" value in a masking bit prevents the assertion of the hardware IntL pin.

Bit	Type	Function	Default
7	Read/Write	Tx3 Bias High Alarm Masking bit for high TX Bias alarm, channel 3	1
6	Read/Write	Tx3 Bias Low Alarm Masking bit for low TX Bias alarm, channel 3	1
5	Read/Write	Tx3 Bias High Warning Masking bit for high TX Bias warning, channel 3	1
4	Read/Write	Tx3 Bias Low Warning Masking bit for low TX Bias warning, channel 3	1
3	Read/Write	Tx4 Bias High Alarm Masking bit for high TX Bias alarm, channel 4	1
2	Read/Write	Tx4 Bias Low Alarm Masking bit for low TX Bias alarm, channel 4	1
1	Read/Write	Tx4 Bias High Warning Masking bit for high TX Bias warning, channel 4	1
0	Read/Write	Tx4 Bias Low Warning Masking bit for low TX Bias warning, channel 4	1

Upper Page 3: Register 246 through 255: Reserved

Bit	Type	Function	Default
7-0	Read/Write	Reserved	0

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