0x40068000	**BaseAddr**		
0x000	**CTRL1**		**Description**
0	I0EN		1 - Enable
1	V0EN		1 - Enable
6	I3EN		1 - Enable
7	RESOL		0: 16bit, 1: 24bit - Output data
8	ZXLPF		0: On, 1: Off - LPF on V0 cross zero
9..11	PER_LENGTH		0: 1, 1: 2, .. 7: 128 - Period to calc period and dPhase
12..13	APNOLOAD		Вычисление активной энергии без нагрузки:
			0: calc all, 1: calc >= 0,012%, 2: calc >= 0,0061%, 3: calc >= 0,00305%
15..16	VARNOLOAD		Реактивная энергия без нагрузки: - like APNOLOAD
17:18	VANOLOAD		Полная энергия без нагрузки: - like APNOLOAD
19	FREQSEL		1: On, 0: Off (LastValue) - Вычисление периода V0 в FxMD0.PER_FREQ
20	VREF_SEL		0: Internal, 1: External - ADC Vref select
21	BUF_BYP		0: buffered Vref, 1: not buffered
27	ZXRMS		0: continuous, 1: onV0=0 - RMS update
28	RESET_DIG		0: work, 1: reset - Digital part resert
29	IBOOST		0: norm, 1: увеличение тока
30..31	OSR_CONF		0: 256 (4KHz), 1: 128 (8KHz), 2: 64 (16KHz), 3: reserved
	0xF83FBFC3		*ResetMask*
0x004	**CTRL2**		**Description**
0..15	SAGLVL		V0 min OK level
16..23	SAGCYC		Count of half V0 periods to calc MIN_OK_LEVEL
	0x00FFFFFF		*ResetMask*
0x008	**CTRL3**		**Description**
0:11	ZTXOUT		V0=0 Event Timeout
	0x00000FFF		*ResetMask*
0x00C	**F0CTR**		**Description**
0	I0NTEN		0: On, 1: Off - Integrator I0
1	I3NTEN		0: On, 1: Off - Integrator I3
2	VASEL		0: Full E, 1: I_RMS - save to I0DAT/VDAT
3	RARS	WO	WR - clear Active Energy Accum
4	RRRS	WO	WR - clear Reactive Energy Accum
5	RVRS	WO	WR - clear Full Energy Accum
6..7	I0GAIN		0: 0dB, 6dB, 12dB, 18dB - Preamplifier I0 - x1, x2, x4, x8
8..9	VGAIN		0: 0dB, 6dB, 12dB, 18dB - Preamplifier V - x1, x2, x4, x8
10..17	VPHASE		Phase V_I Adjust - 0: sync, -126: -123us, 127: 124us
18..19	I3GAIN		0: 0dB, 6dB, 12dB, 18dB - Preamplifier I3 - x1, x2, x4, x8
20..31	IRMSOS		RMS calibration
	0xFFFFFFFF		*ResetMask*
0x010	**F0WC**		**Description**
0..15	WATTOS		Calibr Bias active energy
16..27	WGAIN		Calibr Gain active energy
	0x0FFFFFFF		*ResetMask*
0x014	**F0WATTP**	**RO**	**Description**
0..31	WATTHRP		High 32 bits of 57 bit Accum - POS active energy
0x018	**F0WATTN**	**RO**	**Description**
0..31	WATTHRN		High 32 bits of 57 bit Accum - NEG active energy
	0xFFFFFFFF		*ResetMask*
0x01C	**F0VC**		**Description**
0..15	VAROS		Calibr Bias reactive energy
16..27	VARGAIN		Calibr Gain reactive energy
	0x0FFFFFFF		*ResetMask*
0x020	**F0VARP**	**RO**	**Description**
0..31	VARHRP		High 32 bits of 57 bit Accum - POS reactive energy
0x024	**F0VARN**	**RO**	**Description**
0..31	VARHRN		High 32 bits of 57 bit Accum - NEG reactive energy
	0xFFFFFFFF		*ResetMask*
0x028	**F0AC**		**Description**
0..11	VRMSOS		Calibr Bias of V_RMS
16..27	VAGAIN		Calibr Gain of FullEnergy
	0x0FFF0FFF		*ResetMask*

0x02C	**F0VR**	**RO**	**Description**
0..31	VAHR		High 32 bits of 57 bit Accum - FULL energy
	0xFFFFFFFF		*ResetMask*
0x030	**F0MD0**		**Description**
0..1	VSEL		0: V, P_act, P_react, P_full - select for **F0VDAT**
2..3	ISEL		0: I, P_act, P_react, P_full - select for **F0I0DAT**
4	ACTS	RO	Active energy Sign in last period
5	REACTS	RO	Reactive energy Sign in last period
6	I0GAIN		0: noGain, 1: +6dB - I0 Gain - x1, x2 **- Умножение при децимации в составе АЦП**
7	V0GAIN		0: noGain, 1: +6dB - V0 Gain - x1, x2
8	I3GAIN		0: noGain, 1: +6dB - I3 Gain - x1, x2
12..28	PER_FREQ	RO	Длительность такта в канале напряжения
29	I3SEL		0: I3_LPF, 1: ADC (before LPF)
30..31	SEL_I_CH		0,3: Auto max(I0, I3), 2: I0, 3: I3 - select I for power calc
	0xFFFFF1FF		*ResetMask*
0x034	**F0MD1**		**Description**
0..15	IPKLVL		Imax Limit
16..31	VPKLVL		Vmax Limit
	0xFFFFFFFF		*ResetMask*
0x038	**F0VPEAK**		**Description**
0..23	VPEAK		Vmax measured. Clear by read. Write set Vmax = 0
0x03C	**F0IPEAK**		**Description**
0..23	IPEAK		Imax measured. Clear by read. Write set Imax = 0
0x040	**F0VDAT**	**RO**	**Description**
0..23	F0VDAT		FIFO of V or Power - by **F0MD0.VSEL**
0x044	**F0I0DAT**	**RO**	**Description**
0..23	F0I0DAT		FIFO of I0 or Power - by **F0MD0.ISEL**
0x048	**F0I3DAT**	**RO**	**Description**
0..23	F0I3DAT		FIFO of I3 or Power - by **F0MD0.I3SEL**
0x04C	**F0VRMS**	**RO**	**Description**
0..23	F0VRMS		V_RMS
0x050	**F0VRMS2**	**RO**	**Description**
0..23	F0VRMS2		V_RMS^2
0x054	**F0IRMS**	**RO**	**Description**
0..23	F0IRMS		I_RMS
0x058	**F0IRMS2**	**RO**	**Description**
0..23	F0IRMS2		I_RMS^2
	0x00FFFFFF		*ResetMask*
0x05C	**F0STAT**		**Description**
0	VF_EMP	RO	FIFO VDAT is Empty
1	VF_FLL	RO	FIFO VDAT is Full
2	VF_OVER		FIFO VDAT is Overflow, wr 1 - to clear
3	IF_EMP	RO	FIFO IDAT is Empty
4	IF_FLL	RO	FIFO IDAT is Full
5	IF_OVER		FIFO IDAT is Overflow, wr 1 - to clear
6	SAGF		1: event V < CTRL2.SAGLVL, wr 1 - to clear
7	PEAKVF		1: event V > F0MD1.VPKLVL, wr 1 - to clear
8	PEAKIF		1: event I > F0MD1.IPKLVL, wr 1 - to clear
9	WATTOVP		**F0WATTP** is Overflow, wr 1 - to clear
10	VAROVP		**F0VARP** is Overflow, wr 1 - to clear
11	VAOV		**F0VR** is Overflow, wr 1 - to clear
12	ZXTOF		Timeout of V cross 0 - CTRL3.ZTXOUT
13	ICHANNEL	RO	0: I0, 1: I3 - active channel
14	FAULTCON		I channel changed, wr 1 - to clear
15	APSIGN		P_act sign changed, wr 1 to clear
16	APNLDFL	RO	P_act < CNTL1.APNOLOAD
17	VARSIGN		P_react sign changed, wr 1 to clear
18	VARNLDFL	RO	P_react < CNTL1.VARNOLOAD
19			
20	VANLDFL	RO	P_full < CNTL1.VANOLOAD
21	ZEROCRS		V crossed 0, wr 1 to clear
22	I3F_EMP	RO	FIFO I3DAC is Empty
23	I3F_FLL	RO	FIFO I3DAT is Full
24	I3F_OVR		FIFO I3DAT is Overflow, wr 1 to clear
25	WATTOVN		**F0WATTN** is Overflow, wr 1 - to clear
26	VAROVN		**F0VARN** is Overflow, wr 1 - to clear
	0x07FFFFFF		*ResetMask*
0x060	**F0MASK**		**Description**

…	…		Все из статуса, кроме 13 бита
	0x07FFEFFF		*ResetMask*
0x114	**CCAL1**		**Description**
0..11	V0BGAIN		V0 calibration gain
12..23	I0BGAIN		I1 calibration gain
	0x00FFFFFF		*ResetMask*
0x120	**CCAL4**		**Description**
0..11	I3BGAIN		I3 calibration gain
	0x00000FFF		*ResetMask*