0x40068000			**BaseAddr**			**Docs**	**SPL**
					- New for BK234		
F0	**F1**	**F2**			**- Diff for F1, F2**		
0x000			**CTRL1**		**Description**		
0			I0EN		1 - Enable		
1			V0EN		1 - Enable		
2			I1EN		1 - Enable		
3			V1EN		1 - Enable		
4			I2EN		1 - Enable		
5			V2EN		1 - Enable		
6			I3EN		1 - Enable		
7			RESOL		0: 16bit, 1: 24bit - Output data		
8			ZXLPF		0: LPF 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		
22			CHOP_EN		0: Normal, 1: Chopper enable		
23..24			CHOP_FREQ		0: fADC/2, /4, / 8, /16 - Chopper freq		
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	**0x064**	**0x0BC**	**FxCTR**		**Description**		
0			I0NTEN / INTEN		0: On, 1: Off - Integrator I0		
1			I3NTEN / HET		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 / IGAIN		0: 0dB, 6dB, 12dB, 18dB - PGA I0 - x1, x2, x4, x8		
8..9			VGAIN		0: 0dB, 6dB, 12dB, 18dB - PGA V - x1, x2, x4, x8		
10..17			VPHASE		Phase V_I Adjust - 0: sync, -126: -123us, 127: 124us		

18..19			I3GAIN / HET		0: 0dB, 6dB, 12dB, 18dB - PGA I3 - x1, x2, x4, x8		
20..31			IRMSOS		RMS calibration		
			0xFFFFFFFF		*ResetMask*		
0x010	**0x068**	**0x0C0**	**FxWC**		**Description**		
0..15			WATTOS		Calibr Bias active energy		
16..27			WGAIN		Calibr Gain active energy		
			0x0FFFFFFF		*ResetMask*		
0x014	**0x06C**	**0x0C4**	**FxWATTP**	**RO**	**Description**		
0..31			WATTHRP		High 32 bits of 57 bit Accum - POS active energy		
0x018	**0x070**	**0x0C8**	**FxWATTN**	**RO**	**Description**		
0..31			WATTHRN		High 32 bits of 57 bit Accum - NEG active energy		
			0xFFFFFFFF		*ResetMask*		
0x01C	**0x074**	**0x0CC**	**FxVC**		**Description**		
0..15			VAROS		Calibr Bias reactive energy		
16..27			VARGAIN		Calibr Gain reactive energy		
			0x0FFFFFFF		*ResetMask*		
0x020	**0x078**	**0x0D0**	**FxVARP**	**RO**	**Description**		
0..31			VARHRP		High 32 bits of 57 bit Accum - POS reactive energy		
0x024	**0x07C**	**0x0D4**	**FxVARN**	**RO**	**Description**		
0..31			VARHRN		High 32 bits of 57 bit Accum - NEG reactive energy		
			0xFFFFFFFF		*ResetMask*		
0x028	**0x080**	**0x0D8**	**FxAC**		**Description**		
0..11			VRMSOS		Calibr Bias of V_RMS		
16..27			VAGAIN		Calibr Gain of FullEnergy		
			0x0FFF0FFF		*ResetMask*		
0x02C	**0x084**	**0x0DC**	**FxVR**	**RO**	**Description**		
0..31			VAHR		High 32 bits of 57 bit Accum - FULL energy		
			0xFFFFFFFF		*ResetMask*		
0x030	**0x088**	**0x0E0**	**FxMD0**		**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 / IGAIN		0: noGain, 1: +6dB - I0 Gain - x1, x2 **- Умножение при децимации в составе АЦП**		
7			V0GAIN / VGAIN		0: noGain, 1: +6dB - V0 Gain - x1, x2		
8			I3GAIN / HET		0: noGain, 1: +6dB - I3 Gain - x1, x2		
12..28			PER_FREQ	RO	Длительность такта в канале напряжения		
29			I3SEL / HET		0: I3_HPF, 1: ADC (before HPF)		
30..31			SEL_I_CH / HET		0,3: Auto max(I0, I3), 1: I0, 2: I3 - select I for power calc		
			0xFFFFF1FF		*ResetMask*		
0x034	**0x08C**	**0x0E4**	**FxMD1**		**Description**		
0..15			IPKLVL		Imax Limit		

16..31			VPKLVL		Vmax Limit		
			0xFFFFFFFF		*ResetMask*		
	0x090	**0x0E8**	**FxMD2**	**RO**	**Description**		
	0..16		PHASE		Phase shift V1,V2 ref to V0		
			0x0001FFFF		*ResetMask*		
0x038	**0x094**	**0x0EC**	**FxVPEAK**		**Description**		
0..23			VPEAK		Vmax measured. Clear by read. Write set Vmax = 0		
0x03C	**0x098**	**0x0F0**	**FxIPEAK**		**Description**		
0..23			IPEAK		Imax measured. Clear by read. Write set Imax = 0		
0x040	**0x09C**	**0x0F4**	**FxVDAT**	**RO**	**Description**		
0..23			F0VDAT		FIFO of V or Power - by **F0MD0.VSEL**		
0x044	**0x0A0**	**0x0F8**	**FxI0DAT / IDAT**	**RO**	**Description**		
0..23			F0I0DAT		FIFO of I0 or Power - by **F0MD0.ISEL**		
0x048	**---**	**---**	**FxI3DAT / HET**	**RO**	**Description**		
0..23			F0I3DAT		FIFO of I3 or Power - by **F0MD0.I3SEL**		
0x04C	**0x0A4**	**0x0FC**	**FxVRMS**	**RO**	**Description**		
0..23			F0VRMS		V_RMS		
0x050	**0x0A8**	**0x100**	**FxVRMS2**	**RO**	**Description**		
0..23			F0VRMS2		V_RMS^2		
0x054	**0x0AC**	**0x104**	**FxIRMS**	**RO**	**Description**		
0..23			F0IRMS		I_RMS		
0x058	**0x0B0**	**0x108**	**FxIRMS2**	**RO**	**Description**		
0..23			F0IRMS2		I_RMS^2		
			0x00FFFFFF		*ResetMask*		
			0x00FFFFFF		*ResetMask*		
0x05C	**0x0B4**	**0x10C**	**FxSTAT**		**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 / HET	RO	0: I0, 1: I3 - active channel		
14			FAULTCON / HET		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 / HET	RO	FIFO I3DAC is Empty		
23			I3F_FLL / HET	RO	FIFO I3DAT is Full		
24			I3F_OVR / HET		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	**0x0B8**	**0x110**	**FxMASK**		**Description**		
…			…		Все из статуса		
			0x07FFEFFF		*ResetMask*		
0x114			**CCAL1**		**Description**		
0..11			V0BGAIN		V0 calibration gain		
12..23			I0BGAIN		I1 calibration gain		
			0x00FFFFFF		*ResetMask*		
	0x118		**CCAL2**		**Description**		
	0..11		V1BGAIN		V0 calibration gain		
	12..23		I1BGAIN		I1 calibration gain		
			0x00FFFFFF		*ResetMask*		
		0x11C	**CCAL3**		**Description**		
		0..11	V2BGAIN		V0 calibration gain		
		12..23	I2BGAIN		I1 calibration gain		
			0x00FFFFFF		*ResetMask*		
0x120			**CCAL4**		**Description**		
0..11			I3BGAIN		I3 calibration gain		
			0x00000FFF		*ResetMask*		