



8-bit MCU

P/N	CPU	Clock Frequency (MHz)		Memory (KB) ECC	LIN 2.2A, SAE J2602 Controller + Phy	LED driver	Touch key sensors (Gen 3)	Active proximity sensors	GPIO	ADC	DAC	Timers	I2C/SPI/UART	-40°C to +85°C	-40°C to +125°C	AEC-Q100	Package
IS31/32CS8974	8051	16	32	-	-	19	-	-	20	•	•	•	•	IS32	IS32	TSSOP-24	TSSOP-24
IS31/32CS8975		16	-	•		11			12	•	•	•	•			QFN-24	QFN-24
						9			10	•	•	•	•			TSSOP-16	TSSOP-16
IS32CS8976		32	64	-		27	•	•	28	•	•	•	•			SOP-8	SOP-8
IS31/32CS8977				•		20	-	-	20	•	•	•	•			TSSOP-20	TSSOP-20
IS32CS8978				•		20	-	-	20	•	•	•	•			TSSOP-20/24/28	TSSOP-20/24/28
IS31/32CS8979				-			18 ch	•	•	9	•	•	•			•	LQFP-32

32-bit MCU

P/N	CPU	Clock Frequency [MHz]	Memory [KB] ECC	LED				Touch Key Sensor		GPIO	ADC	DAC	Timers	I2C/EUART1/EUART2 with LIN 2.0/2.2 ext/SPI	-40°C to +85°C	-40°C to +125°C	AEC-Q100	Packages
				LED Matrix Driver	CAN-FD Controller	LED Video Serial bus	LED Lumi bus	Touch key sensors [Gen 3]	Active proximity sensor									
IS31/32CS9202	ARM Cortex M0+	Up to 50	256	-	•	•	•	Up to 39	•	Up to 42	•	•	•	•	IS31	IS32	IS32	QFN-48 WQFN-48 QFN-32 WQFN-32 LQFP-48
IS31/32CS9310	RISC-V	Up to 32	256	8 x 12	-	-	-	Up to 16	•	Up to 35	•	•	•	•	IS31	IS32	IS32	eLQFP-64

Touch Sensor

P/N	Cap touch channels	Touch Sensor Controller				I2C	GPIO	Sensitivity Setting	-40°C to +85°C	-40°C to +125°C	AEC-Q100	Package
		Touch sensor Shield	Auto sleep / wake on touch	Active proximity sensor	Passive proximity sensor							
IS31/32SE5120A	24	•	•	•	•	•	•	•	IS31	IS32	IS32	LQFP-32
IS31/32SE5117B	16	•	•	-	•	•	•	•	IS31	IS32	IS32	QFN-24
IS31/32SE5118A	8	•	•	-	•	•	•	•	IS31	IS32	IS32	TSSOP-16

MPU Product Table



	X2600	X2000	X1600
Process (nm)	22	28	40
Main CPU (GHz)	XBurst 2 @ 1.2	XBurst 2 @ 1.2	XBurst 1 @ 1
Co-processor (MHz)	RISC-V @ 600	-	-
Single Instruction Multiple Data (SIMD)	•	•	•
Security CPU (MHz)	XBurst 0 @ 300	XBurst 0 @ 300	XBurst 0 @ 300
SIP (MB)	128/256/512	128/256/512	32/64/128
Media Interface	MIPI-DSI (Up to 1080p)	•	
	MIPI-CSI2 (1280p x 1080p)		•
	LVDS (1280p x 800p)	•	-
	RGB (800p x 480p to 1024p x 600p)	•	•
	DVP	•	-
	SLCD (320p x 240p to 480p x 272p)	•	•
	Camera Interface Module	-	•
	AIC Controller	-	•
Peripheral Interfaces	Flash (EMC/SFC/SD)	•	•
	ADC	16ch, 12-bit	6ch, 10-bit
	GPIO	•	•
	USB OTG	-	1
	USB 2.0	2	-
	I2C	4	2
	SPI Master	2	1
	SPI Slave	1	1
	UART	8	4
	PWM	1	-
	TCU	2	2
	TPC	1	1
	CDBUS	-	1
	CAN 2.0	2	1
	RMII	1	1
	RGMII	-	-
	MMC/SD/SDIO	-	3
	SSIO	-	2
	Smart Card Controller	-	1
	Printer Controller	•	-
	Audio Interface	AIC, I2S, DMIC x4, Audio Codec [mono], PCM	I2S, DMIC x8, Audio Codec [mono], PCM, S/PDIF
	Temp Range	-40°C to +125°C	-40°C to +125°C
	Package (mm)	209 pin [11x11]	270 pin [12 x 12]

NOTE: Lumissil's MPU's XBurst technology is MIPS based

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