Instruction Function Comparison between ATMEGA328P vs LGT8XM

	Number of clock cycles to carry out instruction	
Instruction	**ATMEGA328P**	**LGT8F328P**
ADIW Add immediate to word	2	1
SBIW Subtract immediate to word	2	1
MUL / S / SU 8bit multiply	2	1
FMUL / S / SU Fractional multiply	2	1
RJMP / RCALL Relative jump / call	2-3	1
IJMP / ICALL Indirect jump / call 2	2-3	1
RET / IRET Return 4 2	4	2
CPSE Compare, skip if equal	1-3	1-2
SBIS / SBRS Skip if set	1-3	1-2
SBIC / SBRC Skip if cleared	1-3	1-2
LD / LDD Load indirect	2	1
ST / STD Store indirect	2	1
LPM Load program memory	3	2
PUSH / POP Stack access	2	1

As you can see the LGT8F328P executes several instructions much more quickly thus aiding its speed compared to the older ATMeaga328P.