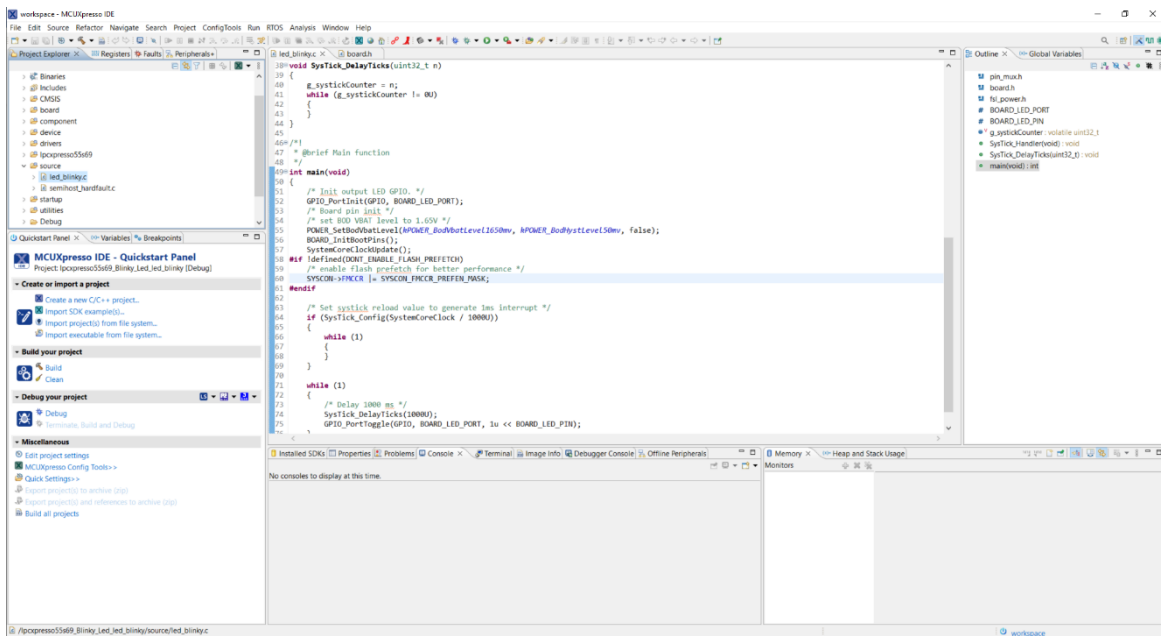
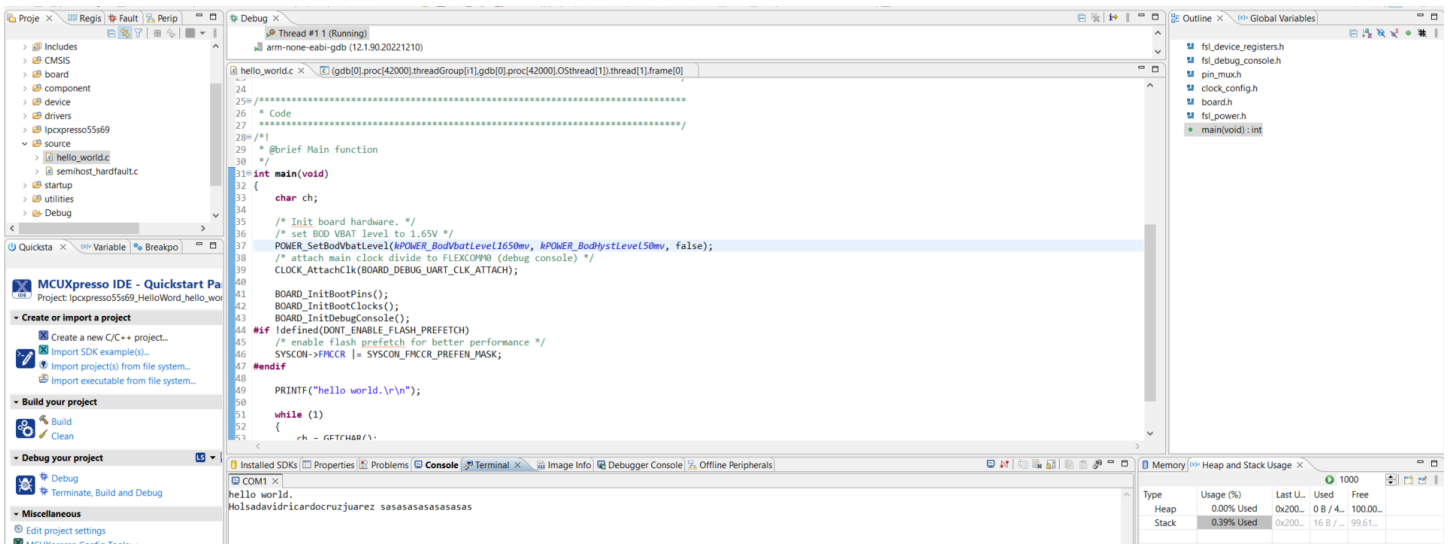


## 04\_01.1\_Instalación de ambiente de desarrollo



## Ejecución del *HELLO\_WORLD* en OKDo E1-EVK



## Ejecución del LED\_Blinky en OKDo E1-EVK

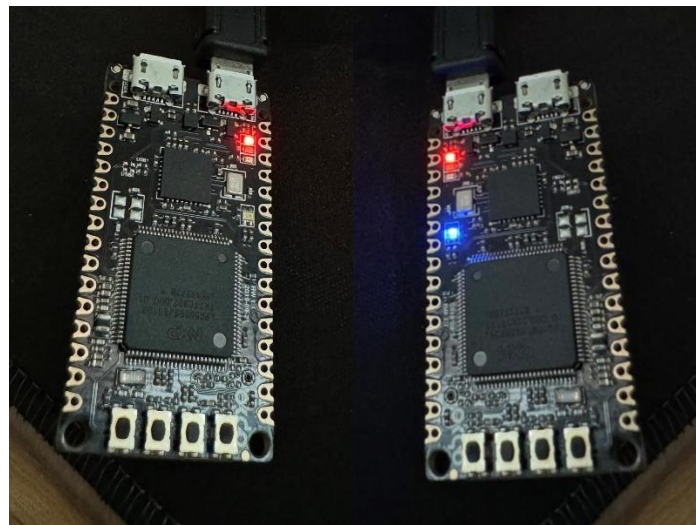
```
led_blinky.c x board.h
30 void SysTick_Handler(void)
31 {
32     if (g_systickCounter != 0U)
33     {
34         g_systickCounter--;
35     }
36 }
37
38 void SysTick_DelayTicks(uint32_t n)
39 {
40     g_systickCounter = n;
41     while (g_systickCounter != 0U)
42     {
43     }
44 }
45
46 /*
47  * @brief Main function
48  */
49 int main(void)
50 {
51     /* Init output LED GPIO. */
52     GPIO_PortInit(GPIO, BOARD_LED_PORT);
53     /* Board pin init */
54     /* set BOD VBAT level to 1.65V */
55     POWER_SetBodVbatLevel(kPOWER_BodVbatLevel1650mv, kPOWER_BodHystLevel50mv, false);
56     BOARD_InitBootPins();
57     SystemCoreClockUpdate();
58     #if !defined(DONT_ENABLE_FLASH_PREFETCH)
59     /* enable flash prefetch for better performance */
60     SYSCON->FMCCR |= SYSCON_FMCCR_PREFEN_MASK;
61     #endif
62
63     /* Set systick reload value to generate 1ms interrupt */
64     if (SysTick_Config(SystemCoreClock / 1000U))
65     {
66         while (1)
67         {
68         }
69     }
70
71     while (1)
72     {
73         /* Delay 1000 ms */
74         SysTick_DelayTicks(1000U);
75         GPIO_PortToggle(GPIO, BOARD_LED_PORT, 1u << BOARD_LED_PIN);
76     }
77 }
```

Installed SDKs Properties Problems Console x Terminal Image Info Debugger Console Offline Peripherals

<terminated> lpcpresso55s69\_Blinky\_Led\_blinky LinkServer Debug [C/C++ (NXP Semiconductors) MCU Application] lpcpresso55s69\_Blinky\_Led\_blinky.axf (Terminated 19 nov. 2023 11:46:32)

[MCUXpresso Semihosting Telnet console for 'lpcpresso55s69\_Blinky\_Led\_blinky LinkServer Debug' started on port 65210 @ 127.0.0.1]

[Closed Telnet Session]



## Ejecución del mbedtls\_benchmark en OKDo E1-EVK

The screenshot displays the MCUXpresso IDE environment. On the left, the project explorer shows the project structure for 'Ipcpresso5569\_BenchMark\_mbedtls\_benchmark'. The central code editor shows the source code for the benchmark, which includes various cryptographic tests. The console window at the bottom displays the output of the benchmark, showing the following results:

Test	Speed	Cycles/byte
MD5	1684.57 KB/s	58.08 cycles/byte
SHA-1	971.42 KB/s	96.02 cycles/byte
SHA-256	207.40 KB/s	453.84 cycles/byte
SHA-512	118.26 KB/s	799.10 cycles/byte
3DES	57.61 KB/s	1655.44 cycles/byte
DES	148.20 KB/s	636.45 cycles/byte
AES-CBC-128	9147.57 KB/s	9.86 cycles/byte
AES-CBC-192	9099.05 KB/s	9.91 cycles/byte
AES-CBC-256	9062.08 KB/s	9.95 cycles/byte
AES-GCM-128	157.96 KB/s	596.80 cycles/byte
AES-GCM-192	157.02 KB/s	600.44 cycles/byte
AES-GCM-256	156.04 KB/s	604.25 cycles/byte
AES-CCM-128	2986.25 KB/s	31.01 cycles/byte
AES-CCM-192	2965.58 KB/s	31.23 cycles/byte
AES-CCM-256	2949.87 KB/s	31.39 cycles/byte
Poly1305	752.14 KB/s	124.44 cycles/byte
CTR_DRBG (NOPR)	948.15 KB/s	98.60 cycles/byte
CTR_DRBG (PR)	644.09 KB/s	145.25 cycles/byte
HWAC_DRBG SHA-1 (NOPR)	68.26 KB/s	1393.11 cycles/byte
HWAC_DRBG SHA-1 (PR)	63.36 KB/s	1502.65 cycles/byte
HWAC_DRBG SHA-256 (NOPR)	23.28 KB/s	4202.39 cycles/byte
HWAC_DRBG SHA-256 (PR)	23.28 KB/s	4202.38 cycles/byte
RSA-1024	271.00 public/s	
RSA-2048	0.75 private/s	
DHE-2048	0.02 handshake/s	
DR-2048	0.02 handshake/s	
ECDSA-secp521r1	1.33 sign/s	
ECDSA-secp384r1	2.00 sign/s	
ECDSA-secp256r1	3.67 sign/s	
ECDSA-secp521r1	1.00 verify/s	
ECDSA-secp384r1	2.00 verify/s	
ECDSA-secp256r1	3.67 verify/s	
ECDHE-secp521r1	0.67 full handshake/s	
ECDHE-secp384r1	0.75 full handshake/s	
ECDHE-secp256r1	1.33 full handshake/s	

The memory usage window on the right shows the following details:

Type	Usage (%)	Last U.	Used	Free
Heap	1.90%	0x200...	7.01 K...	78.10...
Stack	47.68%	0x200...	3.81 K...	52.34...