Q. tET/tPET 系列模块的 PWM 输出精准度可以到 1 ms 吗?

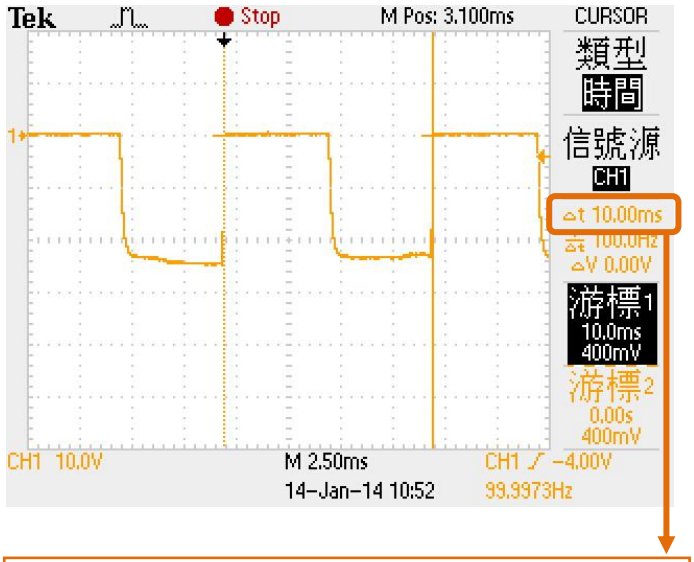
A: 可以的，经过实际测试 Duty Cycle 5 ms 到 15 ms，PWM 精准度可以非常稳定的输出小于 1 ms (Accuracy < 1 ms) 。 需要注意的是，在执行 PWM 输出时，请不要再执行模块的其它功能 (例: DI 频率量测)，否则可能会降底 PWM 精准度。详细测试结果如下所示。

■ 测试环境如下:

操作系统:	Windows XP SP3
模块名称:	tPET-P2C2
Firmware 版本:	v1.2.8
量测仪器:	示波器

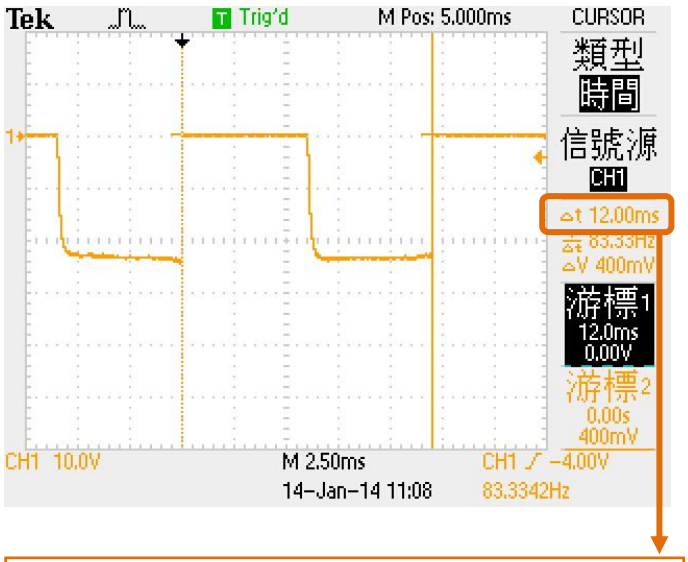
■ 量测 Duty Cycle 5 ms 到 15 ms, 其 PWM 输出精准度如下列图所示:

➢ 图 1: Duty Cycle =5 ms



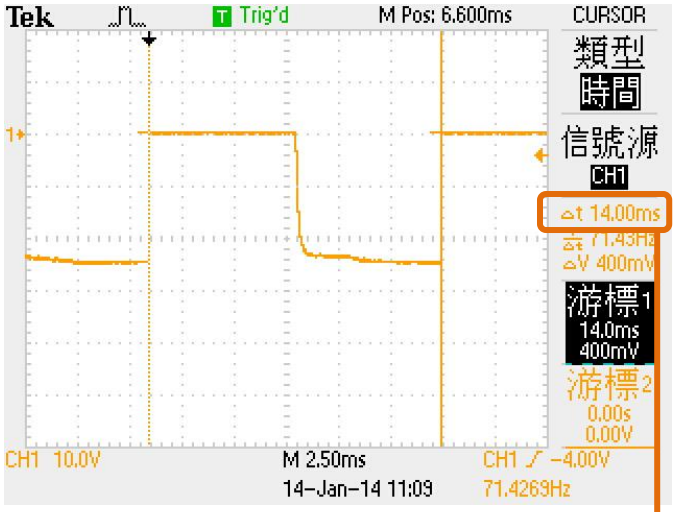
Error =
Desired Duty Cycle (High and Low) – Measured delta t
= (5 ms x 2) – 10.00 ms = 0 ms (< 1 ms)

➢ 图 2: Duty Cycle = 6 ms



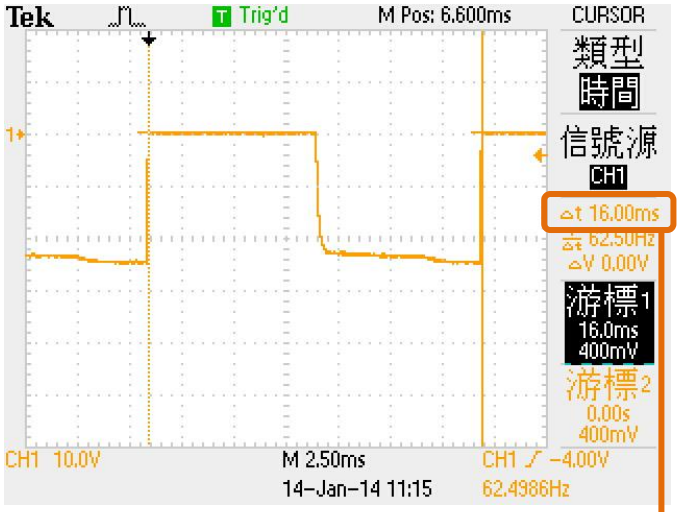
Error =
Desired Duty Cycle (High and Low) – Measured delta t
= (6ms x 2) – 12.00 ms = 0 ms (< 1 ms)

➢ 图 3: **Duty Cycle = 7 ms**



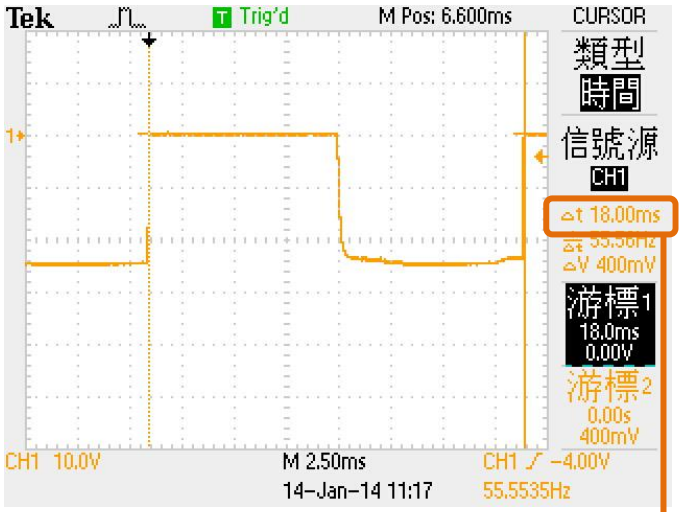
Error =
Desired Duty Cycle (High and Low) – Measured delta t
= (7 ms x 2) – 14.00 ms = 0 ms (< 1 ms)

➢ 图 4: **Duty Cycle = 8 ms**



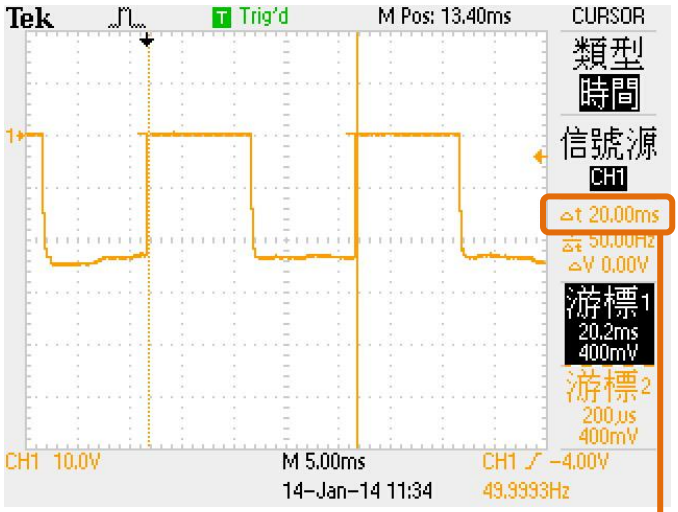
Error =
Desired Duty Cycle (High and Low) – Measured delta t
= (8 ms x 2) – 16.00 ms = 0 ms (< 1 ms)

➢ 图 5: **Duty Cycle = 9 ms**



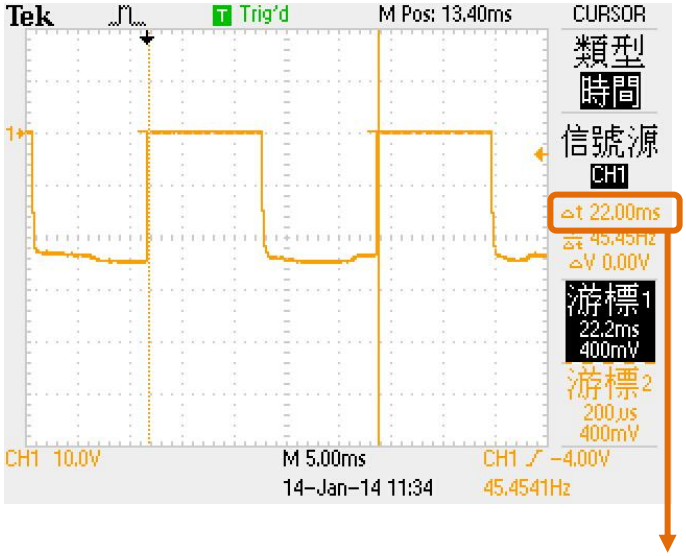
Error =
Desired Duty Cycle (High and Low) – Measured delta t
= (9 ms x 2) – 18.00 ms = 0 ms (< 1 ms)

➢ 图 6: **Duty Cycle = 10 ms**



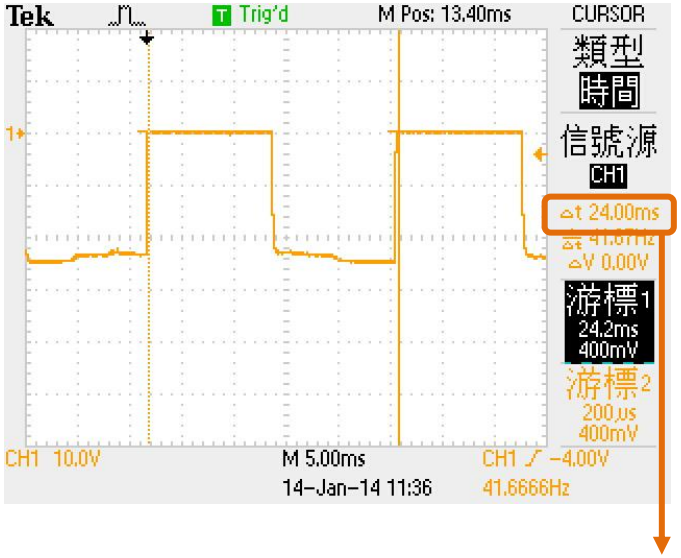
Error =
Desired Duty Cycle (High and Low) – Measured delta t
= (10 ms x 2) – 20.00 ms = 0 ms (< 1 ms)

➢ 图 7: **Duty Cycle = 11 ms**



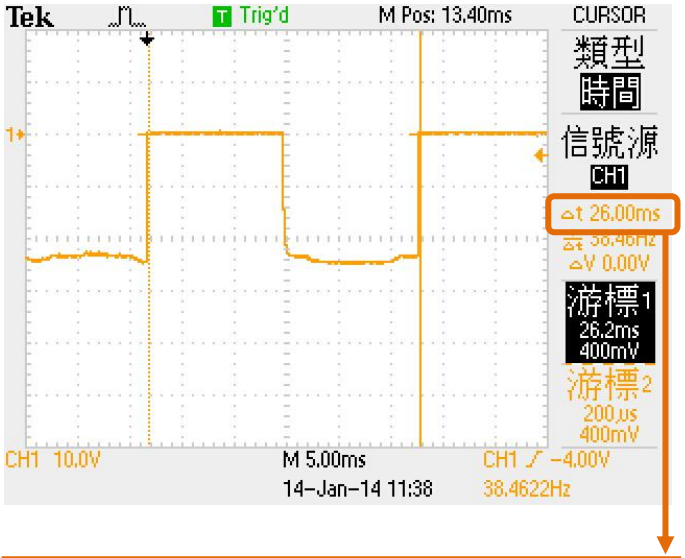
Error =
Desired Duty Cycle (High and Low) – Measured delta t
= (11 ms x 2) – 22.00 ms = 0 ms (< 1 ms)

➢ 图 8: **Duty Cycle = 12 ms**



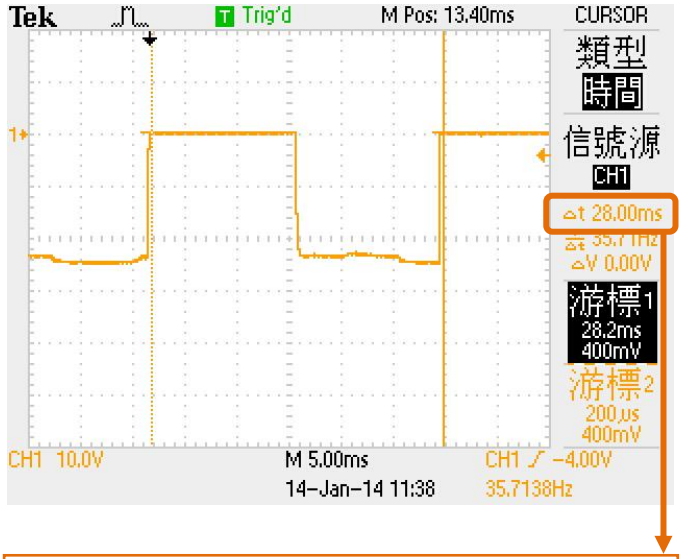
Error =
Desired Duty Cycle (High and Low) – Measured delta t
= (12 ms x 2) – 24.00 ms = 0 ms (< 1 ms)

➢ 图 9: **Duty Cycle = 13 ms**



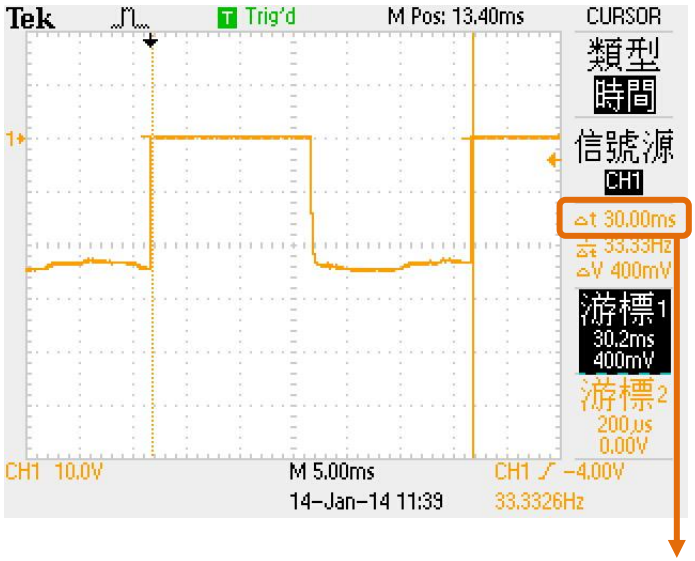
Error =
Desired Duty Cycle (High and Low) – Measured delta t
= (13 ms x 2) – 26.00 ms = 0 ms (< 1 ms)

➢ 图 10: **Duty Cycle = 14 ms**



Error =
Desired Duty Cycle (High and Low) – Measured delta t
= (14 ms x 2) – 28.00 ms = 0 ms (< 1 ms)

➢ 图 11: **Duty Cycle = 15 ms**



Error =
Desired Duty Cycle (High and Low) – Measured delta t
= (15 ms x 2) – 30.00 ms = 0 ms (< 1 ms)